LG Electronics Inc.

LG

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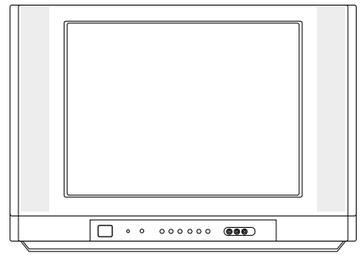
COLOR TV
SERVICE MANUAL

CHASSIS : MC-036A

MODEL:RE/RL-29FB51RQ

CAUTION
BEFORE SERVICING THE CHASSIS,
READ THE SAFETY PRECAUTIONS IN THIS MANUAL.



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SAFETY PRECAUTIONS

IMPORTANT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These parts are identified by ⚠ in the Schematic Diagram and Replacement Parts List.
It is essential that these special safety parts should be replaced with the same components as recommended in this manual to prevent X-RADIATION, Shock, Fire, or other Hazards.
Do not modify the original design without permission of manufacturer.

General Guidance

An **isolation Transformer should always be used** during the servicing of a receiver whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the technician from accidents resulting in personal injury from electrical shocks.

It will also protect the receiver and it's components from being damaged by accidental shorts of the circuitry that may be inadvertently introduced during the service operation.

If any fuse (or Fusible Resistor) in this TV receiver is blown, replace it with the specified.

When replacing a high wattage resistor (Oxide Metal Film Resistor, over 1W), keep the resistor 10mm away from PCB.

Keep wires away from high voltage or high temperature parts.

Due to high vacuum and large surface area of picture tube, extreme care should be used in **handling the Picture Tube**. Do not lift the Picture tube by it's Neck.

X-RAY Radiation

Warning:

The source of X-RAY RADIATION in this TV receiver is the High Voltage Section and the Picture Tube.
For continued X-RAY RADIATION protection, the replacement tube must be the same type tube as specified in the Replacement Parts List.

To determine the presence of high voltage, use an accurate high impedance HV meter.

Adjust brightness, color, contrast controls to minimum.
Measure the high voltage.
The meter reading should indicate
23.5 ±1.5KV: 14-19 inch, 26±1.5KV: 19-21 inch,
29.0±1.5KV: 25-29 inch, 30.0 ± 1.5KV: 32 inch
If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure.

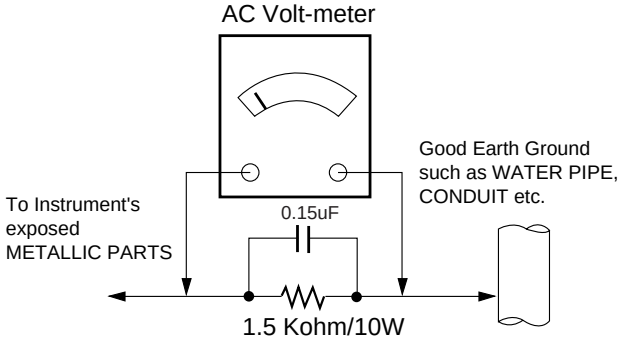
Before returning the receiver to the customer,

always perform an **AC leakage current check** on the exposed metallic parts of the cabinet, such as antennas, terminals, etc., to be sure the set is safe to operate without damage of electrical shock.

Leakage Current Cold Check(Antenna Cold Check)
With the instrument AC plug removed from AC source, connect an electrical jumper across the two AC plug prongs. Place the AC switch in the on position, connect one lead of ohm-meter to the AC plug prongs tied together and touch other ohm-meter lead in turn to each exposed metallic parts such as antenna terminals, phone jacks, etc.
If the exposed metallic part has a return path to the chassis, the measured resistance should be between 1MΩ and 5.2MΩ.
When the exposed metal has no return path to the chassis the reading must be infinite.
An other abnormality exists that must be corrected before the receiver is returned to the customer.

Leakage Current Hot Check (See below Figure)
Plug the AC cord directly into the AC outlet.
Do not use a line Isolation Transformer during this check.
Connect 1.5K/10watt resistor in parallel with a 0.15uF capacitor between a known good earth ground (Water Pipe, Conduit, etc.) and the exposed metallic parts.
Measure the AC voltage across the resistor using AC voltmeter with 1000 ohms/volt or more sensitivity.
Reverse plug the AC cord into the AC outlet and repeat AC voltage measurements for each exposed metallic part. Any voltage measured must not exceed 0.75 volt RMS which is corresponds to 0.5mA.
In case any measurement is out of the limits specified, there is possibility of shock hazard and the set must be checked and repaired before it is returned to the customer.

Leakage Current Hot Check circuit



SERVICING PRECAUTIONS

CAUTION: Before servicing receivers covered by this service manual and its supplements and addenda, read and follow the *SAFETY PRECAUTIONS* on page 3 of this publication.
NOTE: If unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions on page 3 of this publication, always follow the safety precautions. Remember: Safety First.

General Servicing Precautions

1. Always unplug the receiver AC power cord from the AC power source before;
   a. Removing or reinstalling any component, circuit board module or any other receiver assembly.
   b. Disconnecting or re-connecting any receiver electrical plug or other electrical connection.
   c. Connecting a test substitute in parallel with an electrolytic capacitor in the receiver.
      CAUTION: A wrong part substitution or incorrect polarity installation of electrolytic capacitors may result in an explosion hazard.
   d. Discharging the picture tube anode.
2. Test high voltage only by measuring it with an appropriate high voltage meter or other voltage measuring device (DVM, FETVOM, etc) equipped with a suitable high voltage probe. Do not test high voltage by "drawing an arc".
3. Discharge the picture tube anode only by (a) first connecting one end of an insulated clip lead to the degaussing or kine aquadag grounding system shield at the point where the picture tube socket ground lead is connected, and then (b) touch the other end of the insulated clip lead to the picture tube anode button, using an insulating handle to avoid personal contact with high voltage.
4. Do not spray chemicals on or near this receiver or any of its assemblies.
5. Unless specified otherwise in this service manual, clean electrical contacts only by applying the following mixture to the contacts with a pipe cleaner, cotton-tipped stick or comparable non-abrasive applicator; 10% (by volume) Acetone and 90% (by volume) isopropyl alcohol (90%-99% strength)
   CAUTION: This is a flammable mixture.
   Unless specified otherwise in this service manual, lubrication of contacts in not required.
6. Do not defeat any plug/socket B+ voltage interlocks with which receivers covered by this service manual might be equipped.
7. Do not apply AC power to this instrument and/or any of its electrical assemblies unless all solid-state device heat sinks are correctly installed.
8. Always connect the test receiver ground lead to the receiver chassis ground before connecting the test receiver positive lead.
   Always remove the test receiver ground lead last.
9. *Use with this receiver only the test fixtures specified in this service manual.*
   CAUTION: Do not connect the test fixture ground strap to any heatsink in this receiver.

Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called *Electrostatically Sensitive (ES) Devices.* Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by static by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed to prevent potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static type solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.
   CAUTION: Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device.)

General Soldering Guidelines

1. Use a grounded-tip, low-wattage soldering iron and appropriate tip size and shape that will maintain tip temperature within the range or 500°F to 600°F.
2. Use an appropriate gauge of RMA resin-core solder composed of 60 parts tin/40 parts lead.
3. Keep the soldering iron tip clean and well tinned.
4. Thorohly clean the surfaces to be soldered. Use a mall wirebristle (0.5 inch, or 1.25cm) brush with a metal handle. Do not use freon-propelled spray-on cleaners.
5. Use the following unsoldering technique
   a. Allow the soldering iron tip to reach normal temperature. (500°F to 600°F)
   b. Heat the component lead until the solder melts.
   c. Quickly draw the melted solder with an anti-static, suction-type solder removal device or with solder braid.
      CAUTION: Work quickly to avoid overheating the circuit-board printed foil.
6. Use the following soldering technique.
   a. Allow the soldering iron tip to reach a normal temperature (500°F to 600°F)
   b. First, hold the soldering iron tip and solder the strand against the component lead until the solder melts.

c. Quickly move the soldering iron tip to the junction of the component lead and the printed circuit foil, and hold it there only until the solder flows onto and around both the component lead and the foil.
CAUTION: Work quickly to avoid overheating the circuit board printed foil.

d. Closely inspect the solder area and remove any excess or splashed solder with a small wire-bristle brush.

IC Remove/Replacement

Some chassis circuit boards have slotted holes (oblong) through which the IC leads are inserted and then bent flat against the circuit foil. When holes are the slotted type, the following technique should be used to remove and replace the IC. When working with boards using the familiar round hole, use the standard technique as outlined in paragraphs 5 and 6 above.

Removal

1. Desolder and straighten each IC lead in one operation by gently prying up on the lead with the soldering iron tip as the solder melts.
2. Draw away the melted solder with an anti-static suction-type solder removal device (or with solder braid) before removing the IC.

Replacement

1. Carefully insert the replacement IC in the circuit board.
2. Carefully bend each IC lead against the circuit foil pad and solder it.
3. Clean the soldered areas with a small wire-bristle brush. (It is not necessary to reapply acrylic coating to the areas).

"Small-Signal" Discrete Transistor Removal/Replacement

1. Remove the defective transistor by clipping its leads as close as possible to the component body.
2. Bend into a "U" shape the end of each of three leads remaining on the circuit board.
3. Bend into a "U" shape the replacement transistor leads.
4. Connect the replacement transistor leads to the corresponding leads extending from the circuit board and crimp the "U" with long nose pliers to insure metal to metal contact then solder each connection.

Power Output, Transistor Device Removal/Replacement

1. Heat and remove all solder from around the transistor leads.
2. Remove the heatsink mounting screw (if so equipped).
3. Carefully remove the transistor from the heat sink of the circuit board.
4. Insert new transistor in the circuit board.
5. Solder each transistor lead, and clip off excess lead.
6. Replace heatsink.

Diode Removal/Replacement

1. Remove defective diode by clipping its leads as close as possible to diode body.
2. Bend the two remaining leads perpendicular y to the circuit board.
3. Observing diode polarity, wrap each lead of the new diode around the corresponding lead on the circuit board.
4. Securely crimp each connection and solder it.
5. Inspect (on the circuit board copper side) the solder joints of the two "original" leads. If they are not shiny, reheat them and if necessary, apply additional solder.

Fuse and Conventional Resistor Removal/Replacement

1. Clip each fuse or resistor lead at top of the circuit board hollow stake.
2. Securely crimp the leads of replacement component around notch at stake top.
3. Solder the connections.
CAUTION: Maintain original spacing between the replaced component and adjacent components and the circuit board to prevent excessive component temperatures.

Circuit Board Foil Repair

Excessive heat applied to the copper foil of any printed circuit board will weaken the adhesive that bonds the foil to the circuit board causing the foil to separate from or "lift-off" the board. The following guidelines and procedures should be followed whenever this condition is encountered.

At IC Connections

To repair a defective copper pattern at IC connections use the following procedure to install a jumper wire on the copper pattern side of the circuit board. (Use this technique only on IC connections).

1. Carefully remove the damaged copper pattern with a sharp knife. (Remove only as much copper as absolutely necessary).
2. carefully scratch away the solder resist and acrylic coating (if used) from the end of the remaining copper pattern.
3. Bend a small "U" in one end of a small gauge jumper wire and carefully crimp it around the IC pin. Solder the IC connection.
4. Route the jumper wire along the path of the out-away copper pattern and let it overlap the previously scraped end of the good copper pattern. Solder the overlapped area and clip off any excess jumper wire.

At Other Connections

Use the following technique to repair the defective copper pattern at connections other than IC Pins. This technique involves the installation of a jumper wire on the component side of the circuit board.

1. Remove the defective copper pattern with a sharp knife. Remove at least 1/4 inch of copper, to ensure that a hazardous condition will not exist if the jumper wire opens.
2. Trace along the copper pattern from both sides of the pattern break and locate the nearest component that is directly connected to the affected copper pattern.
3. Connect insulated 20-gauge jumper wire from the lead of the nearest component on one side of the pattern break to the lead of the nearest component on the other side. Carefully crimp and solder the connections.
CAUTION: Be sure the insulated jumper wire is dressed so the it does not touch components or sharp edges.

SPECIFICATION

NOTE : Specifications and others are subject to change without notice for improvement.

▪ Scope

This specification can be applied to all the Projection television related to MC-035A Chassis.

Model Name	Brand	Standard input Voltage
RE-32FZ30RX	LG	AC 230V 50/60Hz
RE/RL-29FB51RQ		
RE-28FZ30RQ		

▪ Test and Inspection Method

1) performance:Follow the Standard of LG TV test
2) Standards of Etc requirement

Model Name	Market	Compiance
RE-32FZ30RX		Safety: IEC60065
RE/RL-29FB51RQ		EMC: EN55020,EN55013
RE-28FZ30RQ		EMC: EN55020,EN55013

▪ Test Condition

1) Temperature :20¡ 5°C
2) Relative Humidity:65¡ 10%
3) Use the parts only designated in B.O.M.,PARTS SPEC.,or drawings.
4) Follow each drawing or spec for spec and performance of parts,based upon P/N of B.O.M
5) Warm up TV set for more than 20min. before the measurement.

▪ General Specification

No	Item	Specification	Remark
1	Receiving System	PAL,SECAM-BG PAL,SECAM-DK,PAL-I/' SECAM-LL'	OPTION
2	AV Receiving System	1)NTSC M 2)PAL 3)SECAM	
3	Available Channel	1)VHF:E2~E12 2)UHF:E21~E69 3)CATV:S1~S20 4)HYPER:S21~S41	
4	Input Voltage	AC 230V 50/60 Hz	EU
5	Market	EU,CIS	
6	Screen Size	Flat 29", Wide 28" / 32"	Flat / Wide
7	Tuning System	FVS 100Program	
8	Operating Environment	1) Temp : 0 ~ 40 deg 2) Humidity: 85% under	
9	Storage Environment	1) Temp : -20 ~ 60 deg 2) Humidity: 85% under	

■ Feature and Function

No	Item	Specification	Remark
1	Teletext	TOP, FLOF, LIST 8page	Option
2	Remocon	NEC code	
3	AV input	3	Side or, Front: 1, Rear: 2
4	Component input	X	
5	PERI TV connector	Full SCART:1	AV1
6	RGB input	1	AV1
7	2 Carrier stereo	BG,DK	
8	NICAM stereo	BG,I	
9	2 Carrier Dual	BG,DK	
10	NICAM Dual	BG,I	
11	SSC(Split Screen) mode	X	
12	Multi picture display mode(1,2,12 PIP)	X	
13	Film mode	X	
14	Noise reduction	X	
15	Progressive scan	X	
16	Motion detection	X	
17	DBS	O	
18	Swivel speaker	X	
19	Digital eye	O	Max.: PSM (Dynamic) Min.: PSM (Mild)

ADJUSTMENT INSTRUCTION

1. Application Object

These instructions are applied to all of the color TV, MC-036A.

2. Notes

(1) Because this is not a hot chassis, it is not necessary to use an isolation transformer. However, the use of isolation transformer will help protect test instrument.
(2) Adjustment must be done in the correct order.But the adjustment can be changed by consideration of mass production.
(3) The adjustment must be performed in the circumstance of 25±5°C of temperature and 65±10% of relative humidity if there is no specific designation.
(4) The input AC voltage of the receiver must keep 220V±10% in adjusting.
(5) The receiver must be operated for about 15 minutes prior to the adjustment.

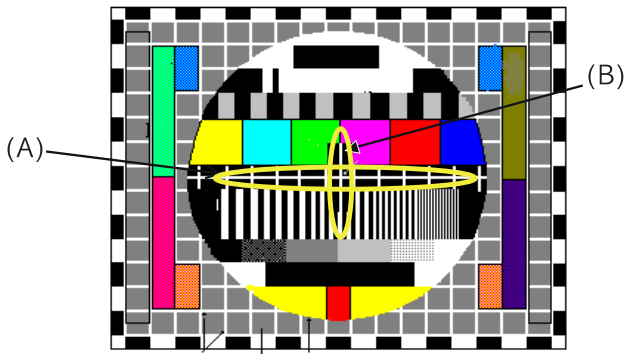
3. Focus adjustment

1. Preliminary steps

(1) Tune the TV set to receive a digital pattern.
(SVC mode: Automatically mode change the STANDARD MODE)

2. Adjustment

(1) Adjust center focus volume of FBT for the best focus of vertical line (B).
(2) Adjust the upper focus volume of FBT for the best focus of area (A).
(3) Repeat above step 1) and 2) for the best overall focus.



4. Purity & Convergence adjustment

4-1. Color purity adjustment

(1) Magnetic room set to destination magnetic and horizontal magnetic set to zero.
(2) It makes CPT or CABINET enough to demagnetization.
(3) Self-adjustment: Adjust by input of Green raster signal
Manual-adjustment: Receive the signal of red raster.
(RF: PG50Ch or A/V input: RED pattern)
(4) Loosen fixed screw of DY and closely to CPT funnel part.
(5) Check the center of screen that purity magnet of CPT by crossing adjustment. At this time, 4 & 6 pole magnet is located to magnet of nothing.
(6) Move the DY to make equal red on whole screen and it does not to make the DY by fixed screw after check a simple color of Red/Green/Blue and white raster whether or not it is a pollution of color.
(At this time, take care raster of screen and DY must fixing in the condition which maintains a horizontality.)
(7) Check the TV set by move direction.

4-2. Convergence adjustment

These adjustments can the best condition of focus after finished purity adjustment.

(1) Receive the signal of cross hatch that color is black.
(2) Adjust brightness and luminosity till dot appear 9 ~12.
(3)Open angle of the two tab of 4 pole magnet by isogonic angle and accord with vertical line of red and blue color in the middle of screen.
(4)Maintain as angle of 3) and rotate the tab to accord with vertical line of Red and Blue color in the middle of screen.
(5) Open angle of the two tab of 6 pole magnet by isogonic angle and accord with vertical line of Red/Blue and Green.
(6) Maintain as angle of 5) and rotate the tab to accord with horizontal line. In case of twisted horizontal line,repeat adjustment of 3) ~ 5) remembering the movement of Red/Green/Blue color.
(7) Move the DY to best condition of convergence and attach the CPT to a rubber-chock for fixed DY.

4-3 Screen voltage adjustment

1. Preliminary steps

(1) Turn on the TV set.
(2) This adjustment should be performed after warming up for more than 15 minutes.

2. Adjustment

(1) Adjust in RF non-signal.
(2) Press the ADJ key of SVC remote controller to make horizontal line.

5. White balance adjustment

This adjustment should be perfomed after screen adjustment.
This adjustment set the self-adjustment rule.

1. Test Equipment

(1) Automatic White balance meter: Incase of self-adjustment
(2) White balance meter(CRT Color Analyzer, CA-100): 1 EA
(3) A SVC remote controller.

2. Preliminary steps

(1) Tune the TV set to receive an 100% white pattern.
(2) This adjustment should be perfomed after screen voltage adjustment.

3. Adjustment

(1) Press the CH ▲,▼ key to select adjustment item.
(2) Press the VOL ◀,▶ key to change data.
(3) Adjustment preliminary steps.
a.In items of picture adjustment,adjust until “CONTRAST” and “BRIGHT” become 45 Ft_L(153Cd/m^2).
b. Press the SVC key to enter adjustment mode.
c. Adjust the Y value of High Light with R-DRIVE and adjust the X value with B-DRIVE until they have the color coordinate of High Light as below.
d. In items of picture adjustment,adjust until “CONTRAST” and “BRIGHT” become 4.5 Ft_L(15.4FT-L).
e. Enter the adjustment mode by pressing the SVC key.
f. Adjust the Y value of Low Light with R-CUTOFF and adjust the X value with B-CUTOFF until they have the color coordinate of Low Light as below.
g.Repeat adjusting until the color coordinate of High and Low Light is satisfied.
h.Check the color coordinate of adjusted condition with white balance meter.

Color temperarure.	X coordinate	Y coordinate	Remark
13000K	266 ± 8	273 ± 8	Non EU(except model)
9000K	288 ±8	295 ± 8	EU (RE,RL model)

	Item	PH 32” FLAT	SS 29” FLAT	SS 28” FLAT	Remark
SERVICE1	CR(0~511)	256	256	256	LOW LIGHT adjument
	CG(0~511)	256	256	256	LOW LIGHT adjument
	CB(0~511)	256	256	256	LOW LIGHT adjument
	WR(0~511)	256	256	256	HIGH LIGHT adjustment
	WG(0~511)	256	256	256	HIGH LIGHT adjustment
	WB(0~511)	256	256	256	HIGH LIGHT adjustment
	SBRI(-255 ~ 254)	20	20	20	SUB BRIGHT adjustment
	YCDEL	-2	-2	-2	

IIC DATA SETTING

	R AMP	R CUT	B AMP	B CUT	SUB BRIGHT	DATA SAVE
OFFSE DATA	0	3	1	2		
IIC WRITE						
SUB ADD	1C8	1C3	1CA	1C5		
START BIT	8	8	8	8		
STOP BIT	0	0	0	0		
EEPROM						
SUB ADD	30,31	2A,2B	34,35	2E,2F		

SLAVE ADDRESS(WRITE)				SUB BRIGHT CONTROL DATA				SPEED
IC	8A	EEPROM	A0					2

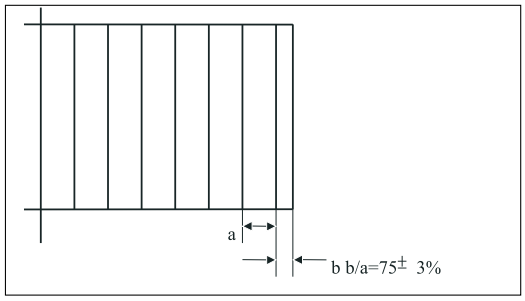
6.Deflection & POP position setting data adjustment.

6.1 Adjustment preparation

(1) Deflection setting data adjustment is operate by SVC communicator.
(2) Enter the adjustment mode by pressing SVC key.
(3) Enter the deflection mode by pressing ADJUST key.
(4) Use the CH ▲,▼ key to select adjustment item.
(5) Use the VOL ◀,▶ key to increase/decrease data.
(6) Tune the TV set to receive PAL-B/G Digital pattern.

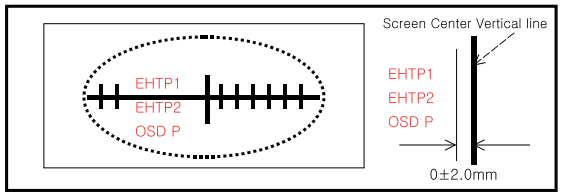
6.2 Adjustment

(1) VL(Vertical Linearity) adjustment:
Adjust the top & bottom size of inner circle to be equal.
(2) VA (Vertical Amplitude) adjustment:
Adjust so that the circle of a digital circle pattern should be located interval of 6~7mm from the effective screen of the CPT.
(3) SC (Vertical S correction) adjustment:
Adjust so that all distance between each lattice width of top/center/bottom are to be the same.
(4) VS (Vertical Shift) adjustment:
Adjust so that the geometric vertical center line is in accord with vertical center line of CPT.
(5) HS(Horizontal Shift) adjustment:
Adjust so that the geometric horizontal center line is in accord with horizontal center line of CPT.
(6) EW(East-West Width) adjustment:
Adjust until the outmost left and right lattice of received pattern is accord with 75% of other lattice width.



(7) ET(East-West Trapezium) adjustment:
Adjust to make the length of top horizontal line same with it of the bottom of horizontal line.
(8) EP (East-West Parabola) adjustment:
Adjust so that middle portion of the outermost left and right vertical line look like parallel with vertical lines of the CPT.
(9) CRNU(Upper Corner Correction) adjustment:
After finished EP adjustment,adjust vertical line of left-top,right-top of screen to the best straight line.
(10)CRNL(Lower Corner Correction) adjustment:
After finished EP adjustment,adjust vertical line of left-bottom ,right-bottom of screen to the best straight line.
(11) BOW adjustment
A standard is not changing the dafault value.
(12) Angle adjustment.
When you adjust the angle,adjust correctly raster of left/right screen.
(13) CRNU6(6' th Order Upper Corner Correction) adjustment
After finished EP adjustment,adjust vertical line of left-top,right-top of screen to the best straight line.
(14) CRNL6(Lower Corner Correction) adjustment:
After finished EP adjustment,adjust vertical line of left-bottom ,right-bottom of screen to the best straight line.

(15) OSD P (OSD POSITION) adjustment.
Adjust so that the character "2" of "EHTP2" is in accord with right of Screen Center Vertical line after finished (1)~ (14) adjustment. (Refer to <figure.1> and <figure.2>.)



<figure.1>

<figure.2>

SERVICE 2 standard DATA

Item	Variable range	PHILIPS 32"FLAT	S/S 29" FLAT	S/S 28" FLAT
VL	-128~127	0	0	0
VA	-128~127	10	19	49
SC	-128~127	20	30	20
VS	-256~255	0	5	0
HS	-512~511	-152	-198	-180
EW	-256~255	5	-13	0
ET	-128~127	0	0	0
EP	-256~255	234	228	239
CRNU	-128~127	4	6	2
CRNL	-128~127	5	6	3
BOW	-512~511	2	0	0
ANGLE	-512~511	1	0	0
CRNU6	-128~127	-1	-1	-1
CRNL6	-128~127	-1	-1	-1
EHTTH	0~2047	250	250	250
EHT	0~511	60	60	60
EHTV1	-512~511	-61	-61	-61
EHTV2	-512~511	-20	-20	-20
EHTH1	-512~511	-97	-97	-97
EHTH2	-512~511	-22	-22	-22
EHT F	0~511	0	0	0
EHTP1	-511~512	-20	-20	-20
EHTP2	-511~512	-40	-40	-40
OSD P	-15~15	0	0	0

SERVICE 3 standard DATA

Item	PHILIPS 32"FLAT	S/S 29" FLAT	S/S 28" FLAT	
IBRM	413	413	413	
WDRM	128	128	128	
CGAIN	50	50	50	
WGAIN	50	50	50	
MWDR	496	496	496	
BCLTH	85	140	135	
BCLTC	400	400	400	
BCLGA	113	230	200	
BCLC	200	200	200	
SVDEL	7	5	5	
SVD	4	4	4	
SVG	30	30	20	
VBSO	23	23	23	
TML	14	15	14	

SERVICE 4 standard DATA

Item	PHILIPS 32"FLAT	S/S 29" FLAT	S/S 28" FLAT	
FP	20	20	20	
NP	83	83	83	
SP	17	17	17	
S1 VOL	102	102	102	
S2 VOL	102	102	102	
AGC-L	230	230	230	
VPC-L	0	0	0	
M-STR	45	45	45	
M-HMC	25	25	25	
M-HP	9	9	9	
M-LP	11	11	11	
M-LIM	252	252	252	

29" Model:
Adjustment must adjust to the N50Hz(Only PAL mode).
W50Hz,N60Hz and W60Hz need not adjustments.(Only 29" model)
28"/32" WIDE Model:
14:9,4:3 MODE H-SH(H-SHIFT) adjustment addition.
Adjust "H-SHIFT" of 14:9 and 4:3 by 50Hz.

* Caution: Adjustment of 50 Hz is 16:9's standard format. When the adjustment is 50Hz wide mode, you must be done re-check.

At this time, ZOOM1 and ZOOM2 Mode need not adjustments. Because it can automatically correct in 16:9 mode.

When you want to re-adjust after deflection adjustment, adjustment is finished after always re-adjustment.

Screen OSD FONT status and adjustment in H-Shift ARC SVC adjustment.

No.	ARC MODE	SVC OSD FONT(50Hz,PAL)	H-SHIFT
1	16:9	50W	Adjustment
2	14:9	50 149	Adjustment
3	ZOOM1	50 Z1	Adjustment X
4	ZOOM2	50 Z2	Adjustment X
5	4:3	50 N	Adjustment

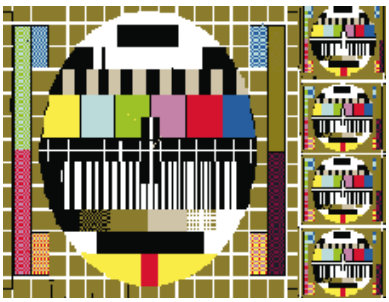
Deflection adjustment standard DATA

Item	Variable range	PAL 100Hz	480I
VL	-128~127	0	0
VA	-128~127	10	10
SC	-128~127	20	20
VS	-256~255	0	0
HS	-512~511	-152	-152
EW	-256~255	5	5
ET	-128~127	0	0
EP	-256~255	234	234
CRNU	-128~127	4	4
CRNL	-128~127	5	5
BOW	-512~511	2	2
ANGLE	-512~511	1	1
CRNU6	-128~127	-1	-1
CRNL6	-128~127	-1	-1
PFGHE	0~1024	0	0
PFGHB	0~1024	0	0
EHTTH	0~2047	250	250
EHTS	0~511	60	60
EHTV1	-512~511	-61	-61
EHTV2	-512~511	-20	-20
EHTH1	-512~511	-97	-97
EHTH2	-512~511	-22	-22
EHT F	0~511	0	0
EHTP1	-511~512	-20	-20
EHTP2	-511~512	-40	-40
OSD P	-15~15	0	0

Adjust in PAL100Hz and PAL50Hz,NTSC60Hz and 480I needed not adjustment.

3.POP POSITION adjustment. (For PIP MODEL)
(1) Press the YELLOW key of SVC remocon to change POP mode.

(1) POS adjustment (H POSITION)
- Adjust POS to the inseparable border between main screen and POP.

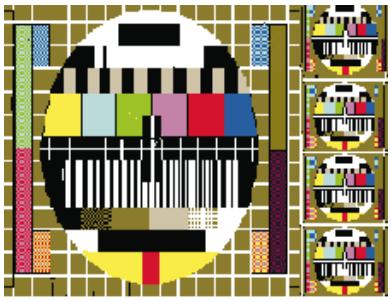


*Caution: Adjustment of this mode only adjust to PAL 50Hz of main screen. But,you must re-check whether or not it is PAL mode.

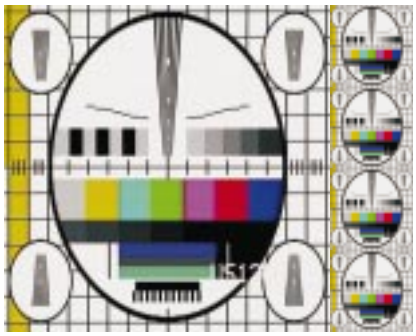
(2) Double Window(POS V) vertical location adjustment
- Adjust POS V to be the same vertical location of main screen and double window.

* Caution: Adjustment of this mode only adjust to PAL50Hz of main screen. In case of NTSC60Hz, the adjustment needs not.

(3) POS 50 adjustment
- Change the main input to PAL signal and then adjust POS50 to identity of vertical location.



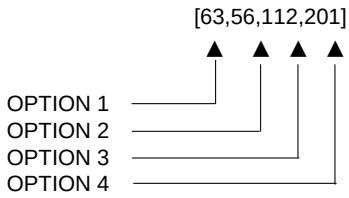
(4) POS 60 adjustment
- Change the main input to NTSC signal and then adjust POS60 to identity of vertical location.



6.OPTION Adjustment

6-1. Preparation for Adjustment

1) This option adjustment decides funtion in accordance with model.
   Press the SVC TX adjustment button(IN-START button) at SVC mode,then adjust the option at OPTION 1,2,3,4 mode.
2) Mark the option adjustment data like [111,11,111,11] in BOM.



● Mark of BOM

LEVEL	PART NO.	SPECIFICATION	DESCRIPTION
1.	3141VMN382A	MAIN[63.56.112.201]	CHASSIS ASSY

The OPTION 1 data is 113,OPTION 2 data is 63,the oOPTION 3 data is 112,the OPTION 4 data is 201 in this model.

6-2. Adjustment Method

1) Input data directly by the buttons corresponded with OPTION1 ??(0~63), OPTION2 ??(0~63), OPTION3 ???(0~127).
2) Option4???(0~116) controls correspondinglines directly relate with OSD and TXT LANG.
3) Select each OPTION function by the CH Up/Down button and then set up each OPTION by the VOL Up/Down button.

Table 1. OPTION 1 Function

Option	Code	Function	Remark
200PR	0	100 PROGRAM SAVE	
	1	200 PROGRAM SAVE	
TSEAR	0	WITHOUT TURBO SEARCH FUNCTION	WL/CL model
	1	WITH TURBO SEARCH FUNCTION	CT/CE/WT/WE model
I II SV	0	NO SAVE DUAL SOUND CONDITION	EU(WE/WL/CE/C model)
	1	SAVE DUAL SOUND CONDITION	NON-EU (WT/CT model)
TOP	0	FLOP TEXT	Without top text
	1	TOP TEXT	
EYE	0	WITHOUT EYE	
	1	WITH EYE	
A2 ST	0	FM STEREO/DUAL NON ACTIVE	
	1	NICAM AND FM STEREO/DUAL	
SYS	0	BG/I/DK	
	1	BG/L	
	2	BG/I/DK/M	
	3	RESERVED	

Table.2 OPTION 2 Function

Option	Code	Function	Remark
ACMS	0	Without ACMS function	Australia
	1	With ACMS function	
VOL	0	Normal volume curve	EU
	1	Rushed volume curve	
HPHON	0	Without headphone	
	1	With headphone	
DVD	0	Without DVD input	
	1	With DVD input	
SAV3	0	AV3 Y&C not coresspondence	
	1	AV3 Y&C coresspondence	
WOOF	0	Without woofer	
	1	With woofer	
RESE1	0		
	1		
AV SV	0	No save last AV	
	1	Last AV save	

Table. 3 OPTION 3 Function

Option	Code	Function	Remark
WIDE	0	4:3 TV	
	1	16:9 TV	
TEXT	0	WITHOUT TEXT	
	1	WITH TEXT	
CH+AU	0	WITHOUT D/K CHINA or BB SYSTEM	
	1	WITH D/K CHINA or BB SYSTEM	
HEDV	0	WITHOUT HIGH DEVIATION	High deviation
	1	WITH HIGH DEVIATION	
DOLBY	0	WITHOUT DOLBY VIRTUAL	
	1	WITH DOLBY VIRTUAL	
RESE3			NON USED
HOTEL	0	WITHOUT HOTEL FUNCTION	
	1	WITH HOTEL FUNCTION	
RESE2			NON USED

Table 4. OPTION 4 Function

State	Language	Function	Default
LANG	0:ENG Only	English	
	1:EU 5EA	English/German/French/Italy/Spanish	
	2:EU ETC	Pol./Hungary/Czecho/Russia/Eng	
	3:PARSI	English/Parsi	
	4:ARAB URDU	English/French/Arab+Urdu	
	5:English+Hindi	English/Hindi	
	6:English+I+M+V	English/Indonesian/Malaysian/Vietnamese	
	7:English+THAI	English/Thai	
	8:English+China	English/China	
T-LAN	0:West Europe	English/French/Swedish/Czech/German/Spanish/Italian	
	1:East Europe1	Polish/French/Swedish/Czech/German/Slovenian/Italian/Rumanian	
	2:Turkey EU1	English/French/Swedish/Turkish/German/Spanish/Italian	
	3:East EU2	English/Hungarian/Serbian/Czech/German/Polish/Spanish/Italian/	
		Rumanian	
	4:Cyrillic 1	Polish/Russia/Estonian	
	5:Cyrillic 2	Polish/Russia/Swedish/Czech/Estonian	
	6:Cyrillic 3	English/Russia/Estonian/Czech/German/Ukrainian	
	7:Turkey/Greek 1	English/French/Swedish/Turkish/German/Spanish/Italian/Greek	
	8:Turkey/Greek 2	English/Turkish/German/Greek	
	9:Turkey/Greek 3	English/French/Swedish/Turkish/German/Spanish/Italian/Greek	
	10:Arab/France	English/French/Turkish/Arabic	
	11:Arab/English	English/French/Turkish/Arabic	
	12:Arab/Hebrew 1	Hebrew/Arabic	
	13:Arab/Hebrew 2	English/French/Hebrew/Arabic	
	14:Farsi/English	English/French/Turkish/Parsi	
	15:Farsi/France	French/Turkish/Parsi	
	16:Farsi all		

6. Sound Prescaler
Don't adjust mass-production. Because this value of SVC setting is set to come up to standard. Only This standard is for reference.

In case of Phone jack is over 1EA in AV1 & AV2,apply to Phone standard.
- Audio out level: 500mVrms at 100% modulation ratio.

In case of both of AV1 & AV2 is Scartjack,apply to Scartjack standard.
- Audio out level 500Vrms at 54% modulation ratio

* MSP3410 Pre-scaler setting value.

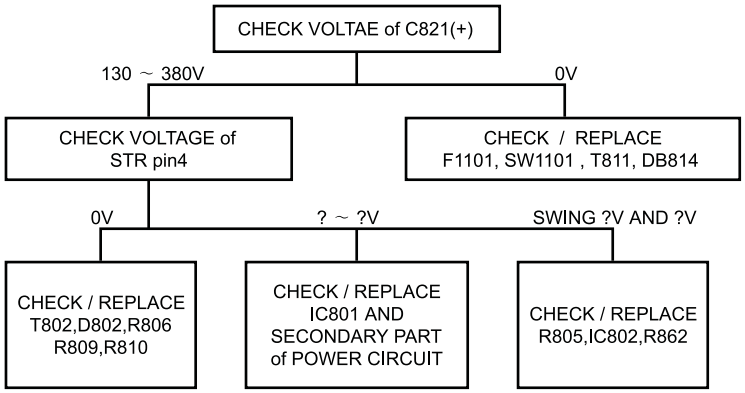
Item	Description	DATA
FP	FM Pre-scaler	20
NP	Nicam Pre-scaler	83
SP	Scart Pre-scaler	17
S1 vol	Scart1 Pre-scaler	102
S2 vol	Scart2 Pre-scaler	102
VPC-L	VPC LEVEL	0
M-STR	EFFECT STRENGTH	45
M-HMC	HARMONIC CONTENT	25
M-HP	HIGH PASS CENTER FREQUENCY	9
M-LP	LOW PASS CENTER FREQUENCY	11
M-LIM	AMPLITUDE LIMIT	252

Table 5. OPTION 4 Function

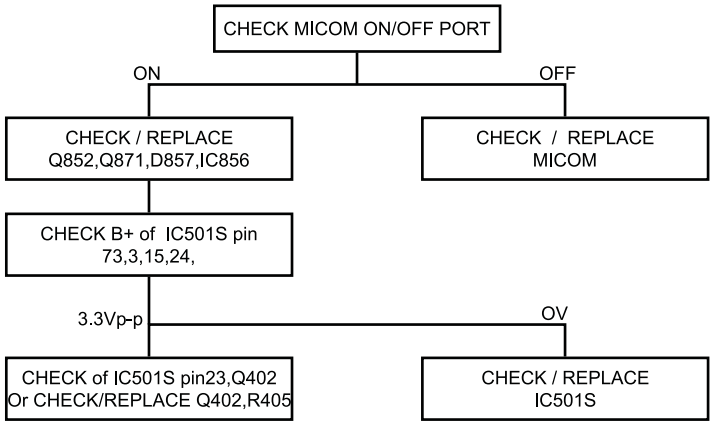
	Item	PH32" FLAT	SS 29" FLAT	REMARK
SERVICE1	S-BRI	20	20	Don't change the value
SERVICE3	IBRM	380	380	For G2 and Rk setting
	WDRM	120	120	For G2 and Rk setting
	CGAIN	60	60	For G2 and Rk setting
	WGAIN	60	50	For G2 and Rk setting
	MWDR	496	496	For Beam eletrocity setting
	BCLTH	181	180	For Beam eletrocity setting
	BCLTC	400	400	For Beam eletrocity setting
	BCLGA	216	170	For Beam eletrocity setting
	BCLC	200	200	
	SVM1	294	294	
	SVM2	4	4	
	PFGHE	301	301	
SERVICE4	PFGHB	301	301	
	FP	21	21	
	NP	83	83	
	SP	40	40	
	S1VOL	110	110	
	S2VOL	110	110	
	SDA-L	16	16	
	VPC-L	0	0	
	M-STR	45	45	
	M-HMC	25	25	
	M-HP	9	9	
	M-LP	11	11	
	M-LTI	252	252	

TROUBLE SHOOTING

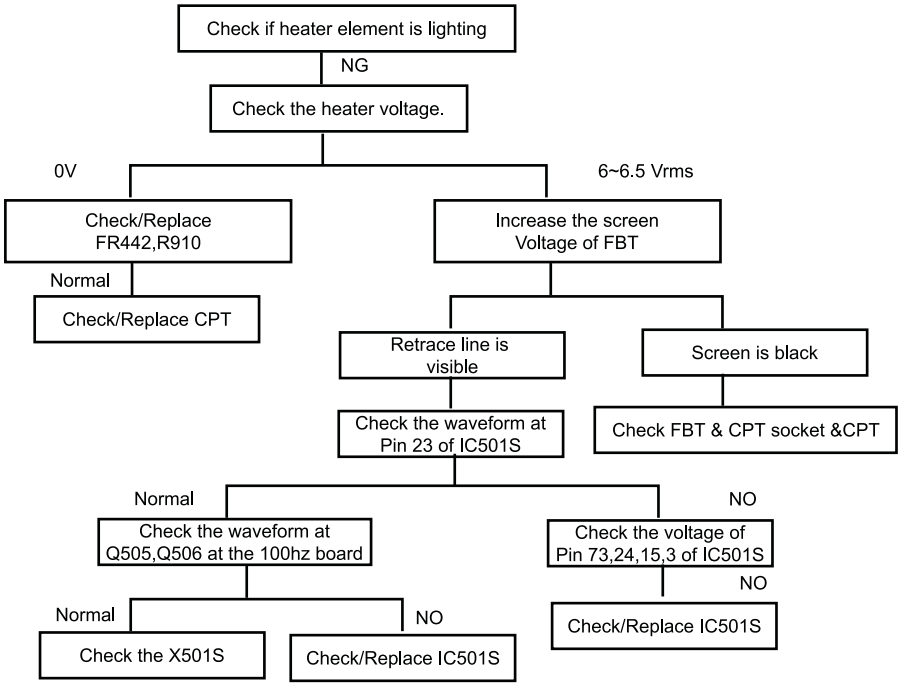
1. NO POWER (NOT WORKING SMPS)


CHECK VOLTAE of C821(+)
130 ~ 380V
0V
CHECK VOLTAGE of STR pin4
CHECK / REPLACE F1101, SW1101 , T811, DB814
0V
? ~ ?V
SWING ?V AND ?V
CHECK / REPLACE T802,D802,R806 R809,R810
CHECK / REPLACE IC801 AND SECONDARY PART of POWER CIRCUIT
CHECK / REPLACE R805,IC802,R862

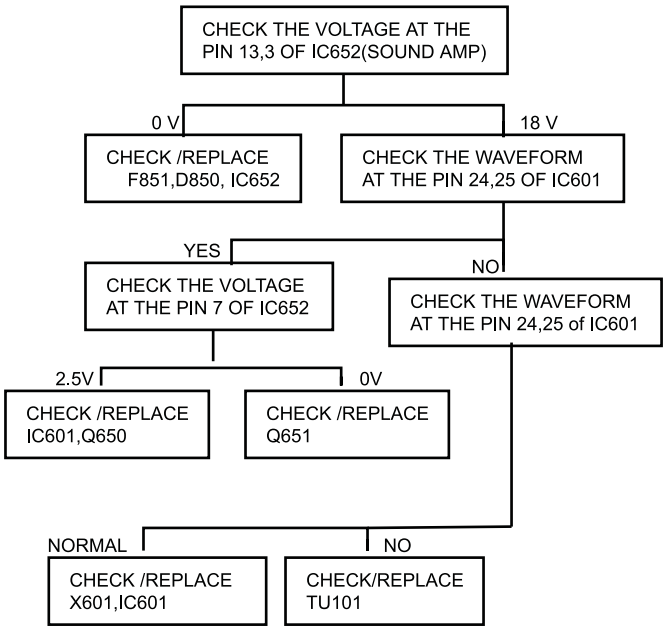
2. NO POWER BUT SMPS WORKING



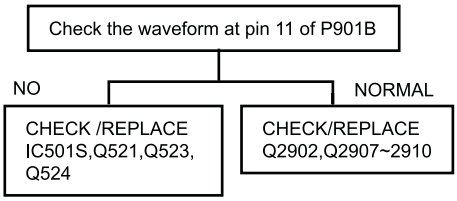
3. NO RASTER & PICTURE (H-OUT OK)



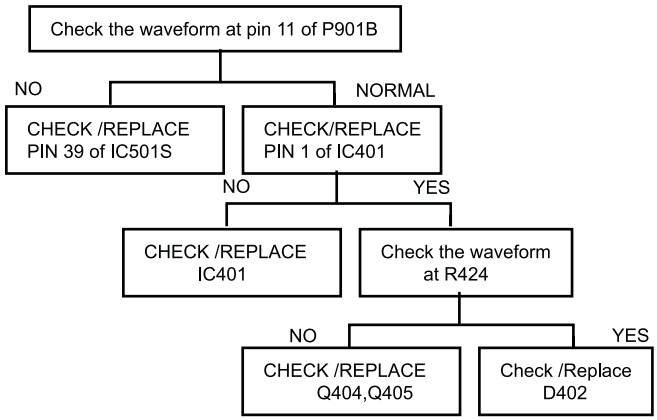
4. NO SOUND(PICTURE OK)



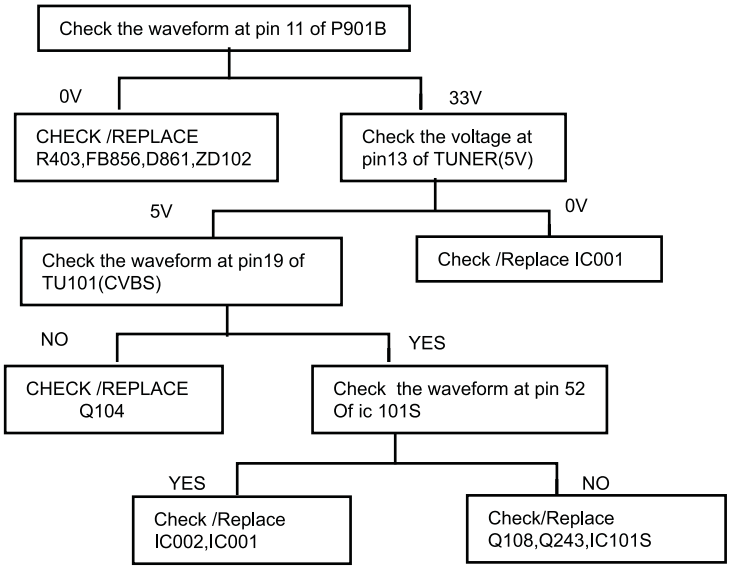
VM DON T WORKING



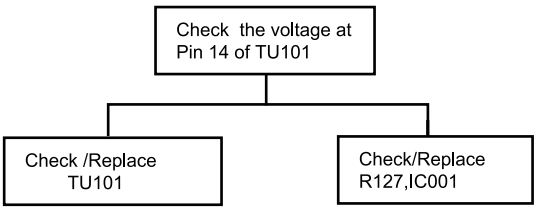
5.PIN CUSHION DISTORTION



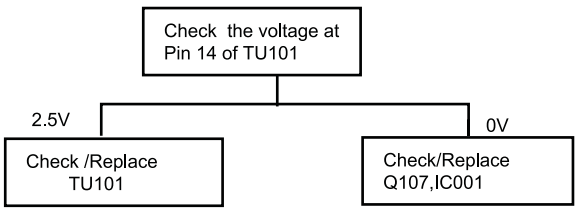
6.DON T CATCH CHANNEL(MAIN)



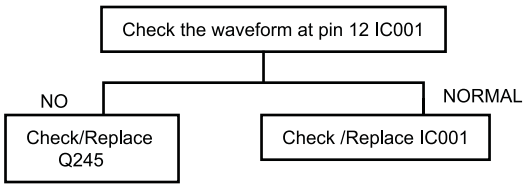
7.DON T CATCH NTSC-M(OPTION)



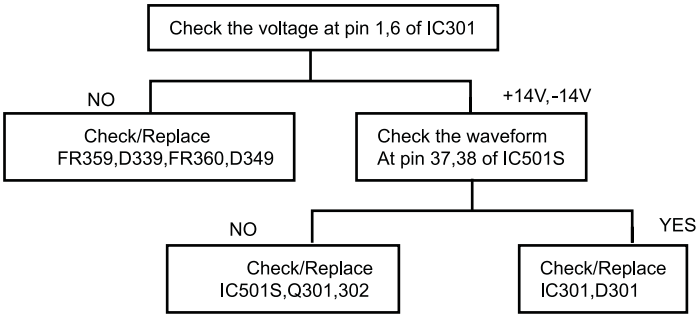
8.DON T CATCH SECAM-L(OPTION)



9.NO TELETEXT

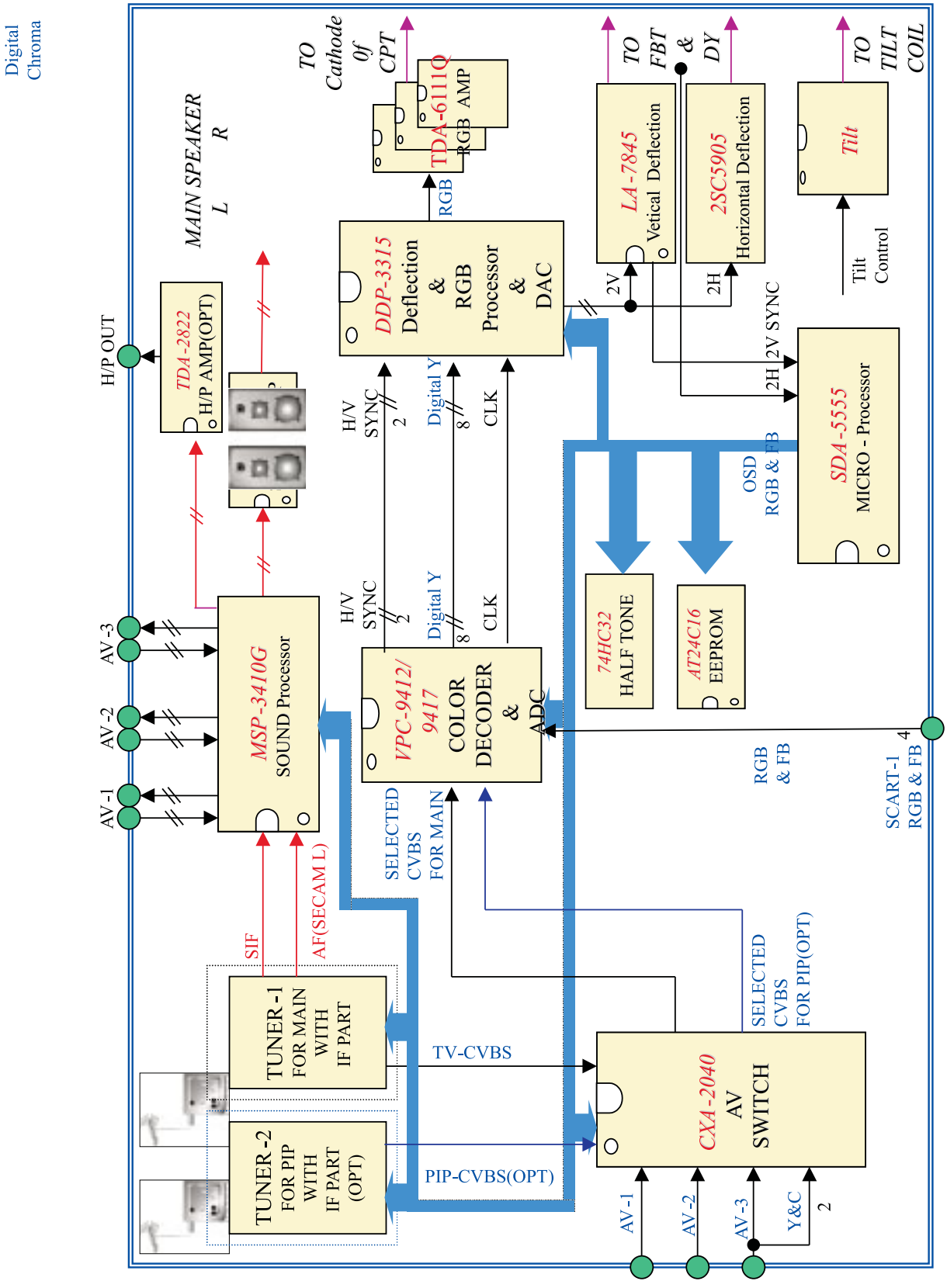


10.NO VERTICAL DEFLECTION

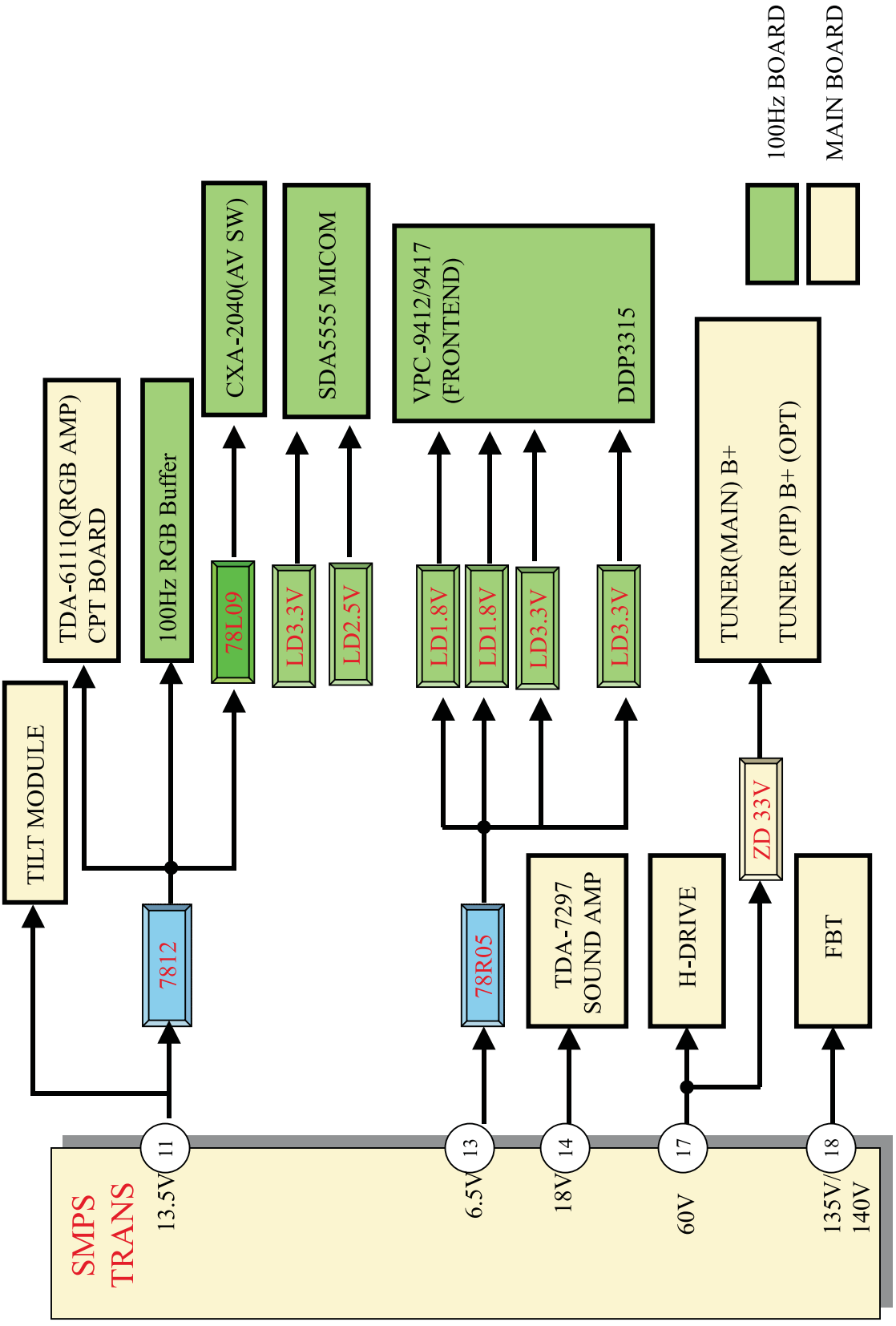


BLOCK DIAGRAM

1.MAIN

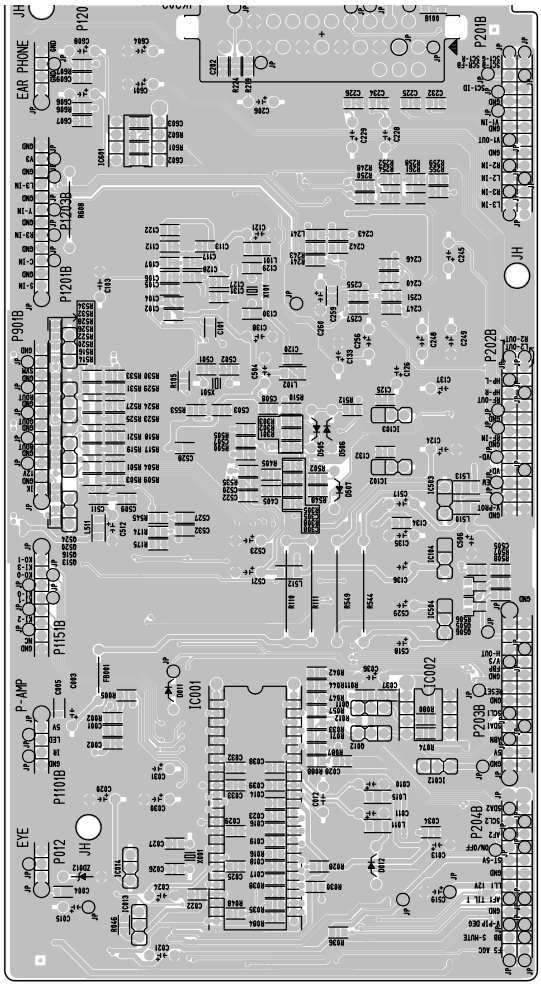


2.SMPS


SMPS TRANS
11
13.5V
13
6.5V
14
18V
17
60V
18
135V/ 140V
TILT MODULE
TDA-6111Q(RGB AMP) CPT BOARD
100Hz RGB Buffer
7812
78L09
CXA-2040(AV SW)
LD3.3V
SDA5555 MICOM
LD2.5V
LD1.8V
LD1.8V
LD3.3V
VPC -9412/9417 (FRONTEND)
DDP3315
LD3.3V
78R05
TDA-7297 SOUND AMP
H-DRIVE
ZD 33V
TUNER(MAIN) B+
TUNER (PIP) B+ (OPT)
FBT
100Hz BOARD
MAIN BOARD

PRINTED CIRCUIT BOARD

MAIN



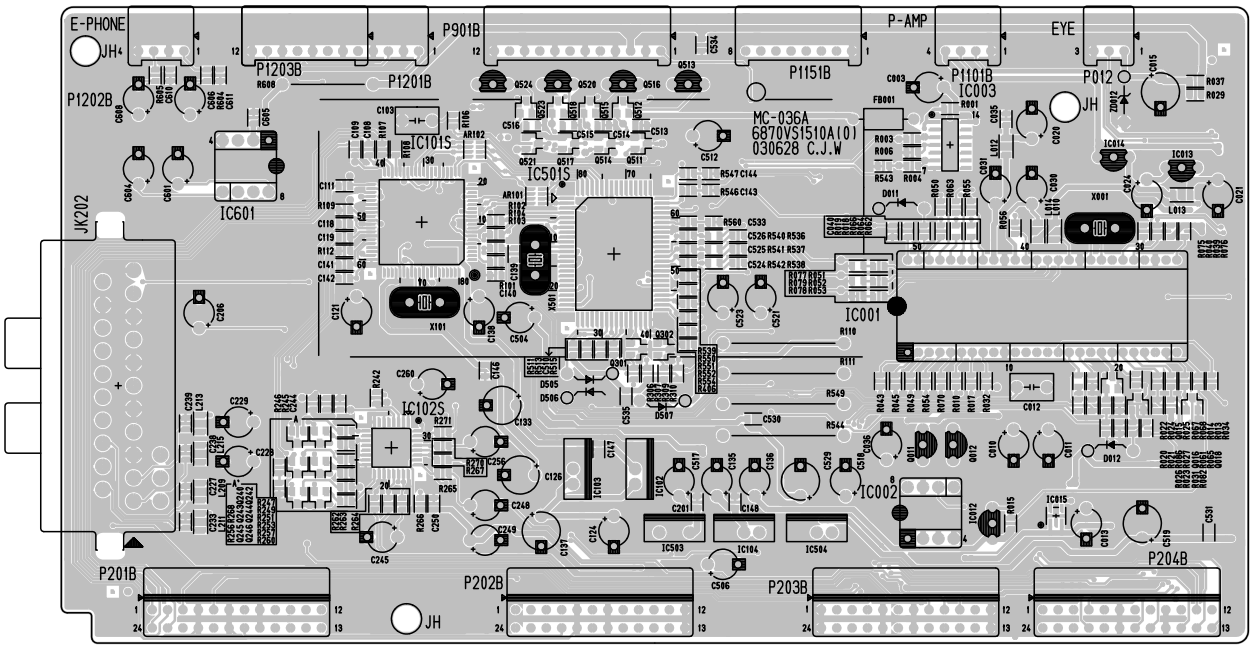
COMPONENT LOCATION GUIDE(MAIN)

C101.....A2
C102.....A2
C103.....A2
C104.....A2
C105.....A4
C106.....A5
C108.....A3
C109.....A3
C111.....A3
C114.....A4
C115.....B3
C116.....B3
C117.....A5
C118.....B2
C119.....B2
C121.....A5
C122.....A5
C123.....A5
C124.....A5
C125.....A3
C126.....B2
C127.....A4
C129.....A5
C161 .....C1
C162 .....C1
C163 .....C1
C164 .....C1
C165 .....C1
C166 .....C1
C167 .....D1
C201.....A4
C202 .....C5
C203 .....D5
C204 .....D5
C206.....B5
C207 .....C5
C208 .....D5
C212 .....D5
C213 .....D5
C214 .....C5
C220.....B5
C221 .....D5
C222 .....D5
C306 .....C4
C307 .....C3
C308.....E4
C310 .....D4
C312 .....D4
C313.....F4
C316 .....D5
C324 .....D4
C331 .....C4
C332 .....D4
C333 .....D4
C338.....E4
C339.....F4
C340.....E5
C341.....E5
C348.....E4
C350.....F4
C401.....E4
C402 .....D4
C403 .....G3
C404 .....G3
C405 .....G4
C406.....F4
C408.....F4
C409 .....G3
C411.....F3
C413.....F3
C414.....E3
C415.....E3
C416 .....C3
C417 .....C3
C418 .....C3
C419 .....C4
C420 .....D5
C421.....E5
C423 .....D3
C426.....E5
C428 .....D5
C436 .....D5
C437.....E5
C438 .....D5
C439.....F4
C440.....F4
C441.....F3
C442.....F3
C446.....E4
C447.....E5
C601.....B4
C602.....B4
C603.....B4
C604.....B4
C605 .....C4
C606 .....C5
C607.....B5
C610.....B5
C611 .....C5
C612.....B5
C613 .....C4
C614 .....C4
C615 .....C4
C617.....B4
C618 .....C5
C619 .....C5
C620 .....C5
C621 .....C5
C622 .....C5
C623 .....C5
C624 .....C4
C625 .....C5
C626 .....C5
C627 .....C5
C628 .....C4
C629 .....C5
C630 .....C4
C631 .....C4
C632.....B4
C633.....B4
C634.....B4
C635.....B5
C636.....B5
C637.....B4
C638.....B4
C639.....B4
C640.....B4
C650.....B1
C651.....B1
C652.....A1
C653.....A1
C654.....B1
C655.....A1
C656.....A1
C657.....B1
C660.....B5
C661.....B5
C662.....B5
C663.....B5
C801 .....D1
C803.....E2
C806.....F2
C807.....E2
C808 .....G2
C809 .....G2
C810.....F3
C811 .....G3
C812.....E1
C813.....F2
C814.....F1
C815.....E2
C816 .....G1
C821.....F2
C824 .....G1
C851 .....D1
C853 .....D1
C855 .....D1
C856 .....C2
C857 .....C2
C858 .....C2
C859 .....D2
C861 .....C1
C862 .....D1
C863 .....D2
C864 .....C2
C866 .....D3
C867.....E3
C868 .....C3
C869.....B2
C870 .....C2
C871 .....C2
C872 .....D3
C873 .....C3
C875 .....C2
D160 .....C1
D161 .....C1
D301 .....D4
D339.....F4
D349.....F4
D351 .....D4
D402 .....G3
D405 .....D5
D410.....F3
D413.....E5
D414.....F4
D425 .....D3
D802.....E2
D803.....E2
D804.....E2
D850 .....D2
D851 .....D1
D852 .....D1
D853 .....D1
D854 .....D1
D855 .....D1
D856 .....D1
D857 .....D1
D858 .....D2
D861 .....D3
D866.....B2
DB814 ....F2
E1 .....G1
E2 .....G1
E3 .....G3
E4 .....G3
E5 .....F2
E6 .....F2
E7 .....E2
E8 .....E2
E9 .....E2
E10.....F5
E11 .....G3
E12 .....G3
E13 .....G4
E14 .....G4
E15 .....G4
E16.....F4
E17.....E5
E18.....F5
E19 .....G5
E20.....F5
E21.....F4
E22.....E4
E23.....E4
E24.....C4
E25.....C4
E29 .....G4
E31.....F5
E32.....A1
E33.....B1
E34.....A1
E35.....B1
E36 .....G5
E37.....F3
E38.....F3
F851.....D2
F855.....D2
F856.....D2
FB204 ....D5
FB301.....E4
FB401.....F4
FB402.....F4
FB801.....F2
FB802.....F2
FB804.....F1
FB805.....F2
FB853 ....D2
FB854 ....D3
FB855 ....D2
FB856 ....D2
FR359.....F4
FR360.....F4
FR442 ....D5
FR443.....F4
FR448.....F5
G1 .....G1
G2 .....G1
G3.....F1
G4 .....G1
G5.....F1
G6 .....G1
G7.....F1
G8.....F1
G9.....F2
G10 .....G2
G11 .....E1
G12 .....E1
G13 .....E1
G14 .....E1
G15.....F2
G16.....F2
G17 .....G2
G18.....F2
G19.....F2
G20 .....E1
G21 .....C2
G22 .....C2
G23 .....C3
G24 .....D3
G25 .....D3
G26 .....D3
G27 .....D3
G28 .....D3
G29 .....D3
G30 .....D3
G31 .....E3
G32 .....E3
G33 .....E3
G34.....F3
G35.....F3
G36.....F3
G37.....F3
G38.....F3
G39 .....E3
G40.....F3
G41.....F3
G42.....F3
G43.....F4
G46 .....G3
G47 .....G4
G48 .....E5
G49 .....E5
G50 .....G3
G51 .....G3
G52 .....G3
G53 .....G3
G54 .....G3
G55 .....G3
G56 .....G4
G57 .....G4
G58 .....G4
G59 .....E5
G60 .....E5
G61 .....E5
G62 .....E5
G63 .....E5
G64 .....E5
G65 .....E4
G66 .....E4
G67 .....E4
G68 .....E4
G69 .....E4
G70 .....E4
G73 .....D4
G74 .....D5
G75 .....C5
G76 .....D5
G77 .....E3
G78 .....E3
G79 .....D2
G80 .....D2
G81 .....D2
G82 .....D2
G83 .....D2
G84 .....D2
G85 .....D2
G86 .....D2
G87 .....D2
G88 .....D2
G89 .....D2
G90 .....D2
G91 .....D2
G92 .....D2
G93 .....D2
G94 .....D2
G95 .....D2
G96 .....D2
G98.....F1
G99 .....C3
G100.....F2
G101.....F2
G102 .....D2
G103 .....D2
G106 .....G3
G107 .....E1
G108.....F1
IC301.....E4
IC401 .....C4
IC601 .....C4
IC650.....B1
IC652.....B1
IC801 .....G2
IC802.....F3
IC803.....E3
IC851 .....D1
IC853 .....C2
IC856 .....C3
J1 .....A1
J2 .....A5
J3 .....A3
J4 .....A3
J5 .....A3
J6 .....A3
J7 .....A2
J8 .....A3
J9 .....A2
J10 .....A4
J11 .....A2
J12 .....A2
J13 .....A2
J14 .....B2
J15 .....A5
J16 .....A4
J17 .....A2
J18 .....A2
J19 .....A2
J20 .....A2
J21 .....A2
J22 .....A3
J23 .....A5
J24 .....A5
J25 .....A2
J26 .....A2
J27 .....A2
J28 .....A4
J29 .....A3
J30 .....A5
J31 .....A3
J32 .....A2
J33 .....A4
J34 .....A4
J35 .....A2
J36 .....A3
J37 .....A4
J38 .....A3
J39 .....A2
J40 .....B3
J41 .....B3
J42 .....B3
J43 .....B3
J44 .....B4
J45 .....B4
J46 .....B1
J49 .....B3
J50 .....B1
J51 .....B2
J52 .....B1
J53 .....B4
J54 .....B2
J55 .....B1
J56 .....B4
J57 .....B1
J58 .....B2
J59 .....C2
J60 .....B4
J62 .....B3
J63 .....B3
J64 .....C3
J65 .....C1
J66 .....B2
J68 .....B2
J69 .....B2
J70 .....B4
J71 .....B2
J72 .....B4
J73 .....B2
J74 .....B4
J75 .....B3
J78 .....B4
J79 .....B4
J81 .....C2
J82 .....C5
J84 .....C3
J85 .....B3
J86 .....C4
J87 .....C5
J88 .....C2
J89 .....C1
J90 .....C4
J91 .....B2
J92 .....D3
J93 .....C3
J94 .....C2
J95 .....D1
J96 .....C2
J97 .....C5
J98 .....C5
J99 .....C5
J100 .....C5
J101 .....C4
J102 .....C5
J103 .....C5
J104 .....C2
J106 .....D4
J107 .....D4
J108 .....D5
J110 .....D4
J113 .....D5
J114 .....C3
J115 .....D5
J116 .....C3
J117 .....D1
J118 .....C3
J119 .....D5
J120 .....D4
J121 .....E3
J122 .....D3
J123 .....D5
J124 .....D5
J125 .....D1
J126 .....D4
J127 .....E4
J128 .....E4
J129 .....E4
J130 .....E4
J131 .....E1
J132 .....E4
J133 .....E1
J134.....F3
J135.....F2
J136.....F1
J137.....F2
J138.....F1
J139.....F2
J140.....F1
J141.....F1
J142.....F1
J145.....G2
J146.....G2
J147.....G2
J148.....G2
J149.....G2
J150.....G2
J151.....G2
J152.....G1
J153.....G1
J154.....G2
J155 .....B3
J156 .....B3
J157.....F3
J158 .....E4
J159 .....E4
J160 .....C1
J161 .....D5
J162 .....E4
J163 .....B3
J164 .....B4
J165.....F5
J316 .....A5
JA201.....C5
JP1 .....F2
JP2 .....F2
JP3.....G1
JP4.....G1
JP5 .....F1
JP6 .....F1
JP7 .....E2
JP8 .....E2
JP9 .....B1
JP12 .....F4
JP13.....D5
JP14.....D5
JP21.....C5
JP22.....C5
JP33.....A1
JP34.....A1
JP35.....A1
JP36.....A1
JP39.....A1
L101 .....A2

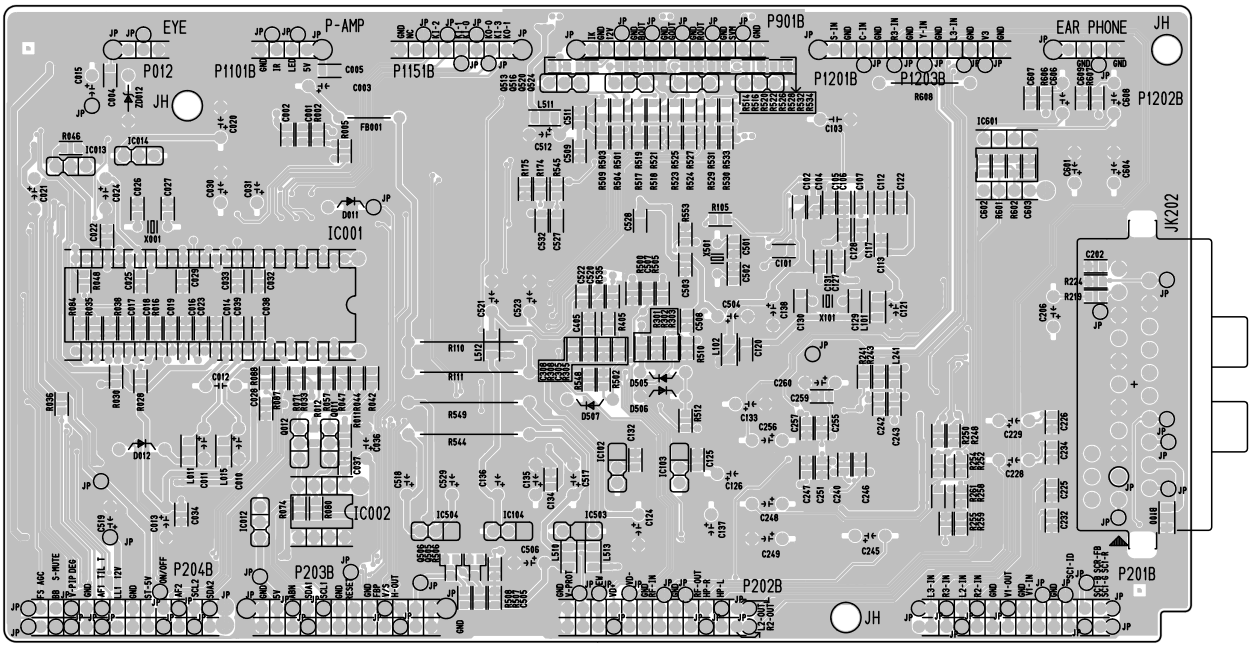
COMPONENT LOCATION GUIDE(MAIN)

L102 .....B5
L204 .....D5
L205 .....C5
L206 .....D5
L207 .....D5
L333 .....E4
L334 .....E4
L401 .....F3
L402 .....D3
L403 .....D3
L404 .....F3
L407 .....E4
L601 .....B4
L603 .....C4
L605 .....C4
L853 .....C3
P013 .....C1
P102 .....A5
P103 .....A5
P402 .....E3
P403 .....F3
P410 .....G5
P650 .....A1
P651 .....A1
P823 .....E1
P824 .....E1
P101A A4
P201A B5
P202A B4
P203A B3
P204A B2
P401A.....F4
P401B.....F4
P401C F4
P401D F4
P803A.....F1
P803B.....F1
P822A G1
P822B G1
P902A D5
Q101 .....A2
Q102 .....A3
Q103 .....A4
Q104 .....A5
Q105 .....A4
Q107 .....A5
Q108 .....A4
Q111 .....A4
Q161 .....C1
Q162 .....C1
Q163 .....C1
Q164 .....C1
Q165 .....D1
Q166 .....C1
Q167 .....C1
Q168 .....C1
Q200 .....A4
Q301 .....B3
Q302 .....B3
Q308 .....D5
Q401 .....G3
Q402 .....E4
Q404 .....D4
Q601 .....B4
Q602 .....B4
Q651 .....B1
Q852 .....D1
Q854 .....E3
Q855 .....C3
Q856 .....B2
Q857 .....D1
Q871 .....B2
R101.....A2
R102.....A2
R103.....A3
R104.....A2
R105.....A2
R106.....A5
R107.....A2
R108.....A2
R109.....A3
R110.....A3
R111.....A5
R112.....A5
R113.....A5
R114.....A3
R115.....A4
R116.....A4
R117.....A5
R119.....A4
R125.....A4
R126.....A4
R127.....A4
R128.....A4
R129.....A5
R130.....A5
R131.....A4
R132.....A4
R133.....A4
R134.....A5
R135.....A4
R136.....A4
R137.....A4
R138.....A4
R160 .....C1
R161 .....C1
R162 .....C1
R163 .....C1
R164 .....C1
R165 .....C1
R166 .....C1
R167 .....D1
R168 .....C1
R169 .....C1
R170 .....C1
R171 .....C1
R172 .....C1
R173 .....C1
R200 .....C5
R201 .....C5
R202 .....C5
R208.....A4
R211 .....C5
R218.....B5
R219 .....C5
R220.....A4
R311 .....D4
R312 .....D5
R313 .....D5
R314 .....D4
R318.....E4
R324 .....D4
R325 .....C4
R326 .....D4
R327 .....D4
R328.....E4
R329 .....D4
R330 .....D3
R331 .....C3
R332 .....C4
R334.....B3
R335.....B3
R401 .....G3
R402.....F3
R403 .....C3
R404 .....G3
R405 .....G4
R406 .....G4
R407.....F3
R410 .....C4
R413 .....C3
R414 .....C3
R415 .....C3
R416 .....C3
R417 .....C4
R418 .....C3
R419 .....C4
R420 .....C3
R421 .....C4
R422 .....C3
R423 .....D4
R424 .....D4
R425.....F4
R426.....E4
R427 .....C3
R430 .....D5
R431 .....G4
R432 .....C3
R434 .....G4
R450.....E5
R451.....E5
R452.....E4
R490.....F3
R601.....B4
R602.....B4
R603.....B4
R604.....B4
R611.....B5
R612.....B5
R613 .....C4
R614.....B4
R615.....B4
R623 .....C4
R624 .....C4
R636.....B5
R637.....B5
R650.....B1
R651.....A1
R652.....A1
R653.....B1
R654.....B1
R656.....A1
R657.....B1
R658.....B5
R659.....B5
R660.....B1
R661.....A1
R662.....A1
R663.....A1
R664.....B1
R665.....B1
R668 .....C5
R669 .....C5
R680.....B4
R801.....F2
R802 .....D1
R803.....E2
R804.....F2
R805 .....G2
R806 .....G2
R807 .....G3
R808.....E2
R809.....F2
R810.....F2
R821.....E3
R832 .....C3
R833.....B3
R851 .....D1
R852 .....C2
R853.....B2
R854 .....D1
R855.....E3
R856.....E3
R857.....B2
R859.....E3
R860 .....C2
R861 .....C3
R862.....B2
R863.....F3
R864 .....C3
R865 .....C3
R866 .....C3
R867.....B3
R868.....B2
R869.....B1
R870 .....D1
R873.....B2
R874 .....C2
R877.....B3
RL801.....E1
RL802.....E1
T401.....G4
T402 .....F5
T403 .....E5
T802 .....E2
T803 .....E1
T811 .....F1
TH801.....F1
TH810 ....E1
TP1.....A4
TP2.....A4
TP3.....A1
TP4.....A3
TP5.....A2
TP6.....A2
TP7.....A3
TP8.....A2
TP9.....A2
TP10.....A5
TP11.....A5
TP12.....A4
TP15.....B1
TP18.....B2
TP19.....A4
TP20.....A4
TP22.....A2
TP23 .....C4
TP24 .....C4
TP25.....B4
TP27 .....C4
TP29 .....C4
TP30 .....C4
TP32 .....C4
TP33 .....C4
TP34 .....C4
TP35 .....C4
TP38 .....C4
TP39 .....C4
TP40 .....C4
TP44.....E3
TP45.....F3
TP46.....E3
TU101 ....A5
TU102 ....A3
VD801 ....F2
X601.....C5
ZD101 ....A2
ZD102 ....A5
ZD401 ....C3
ZD601 ....B4
ZD650 ....B1

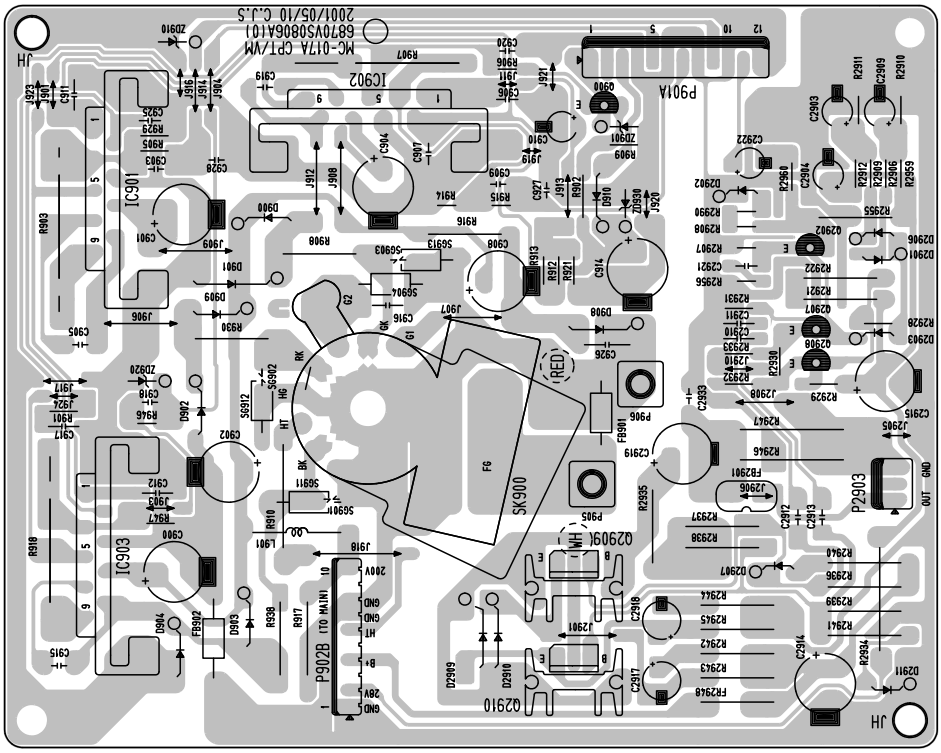
100Hz(TOP)



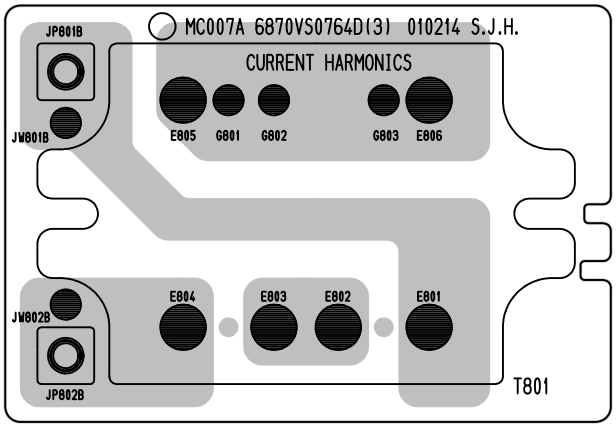
100Hz(BOTTOM)



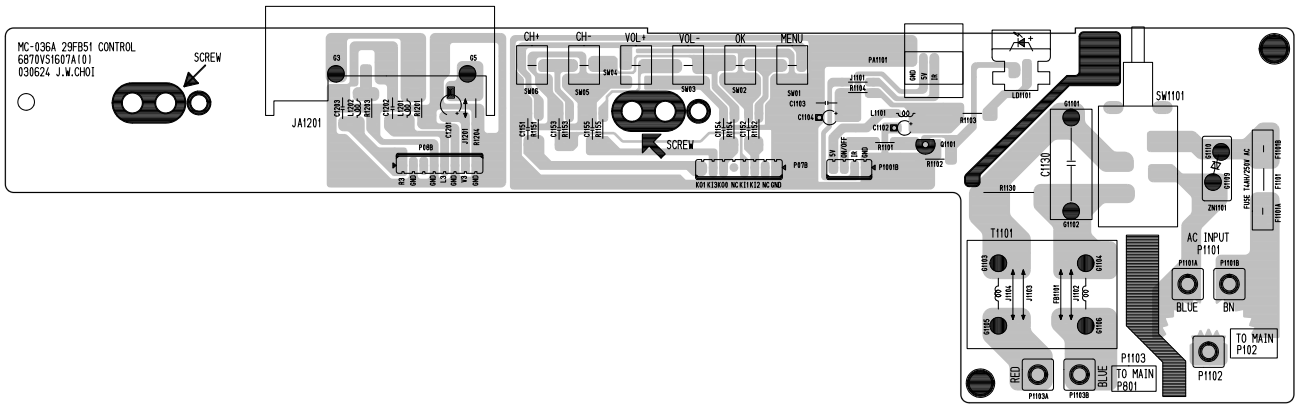
CPT



REACTOR

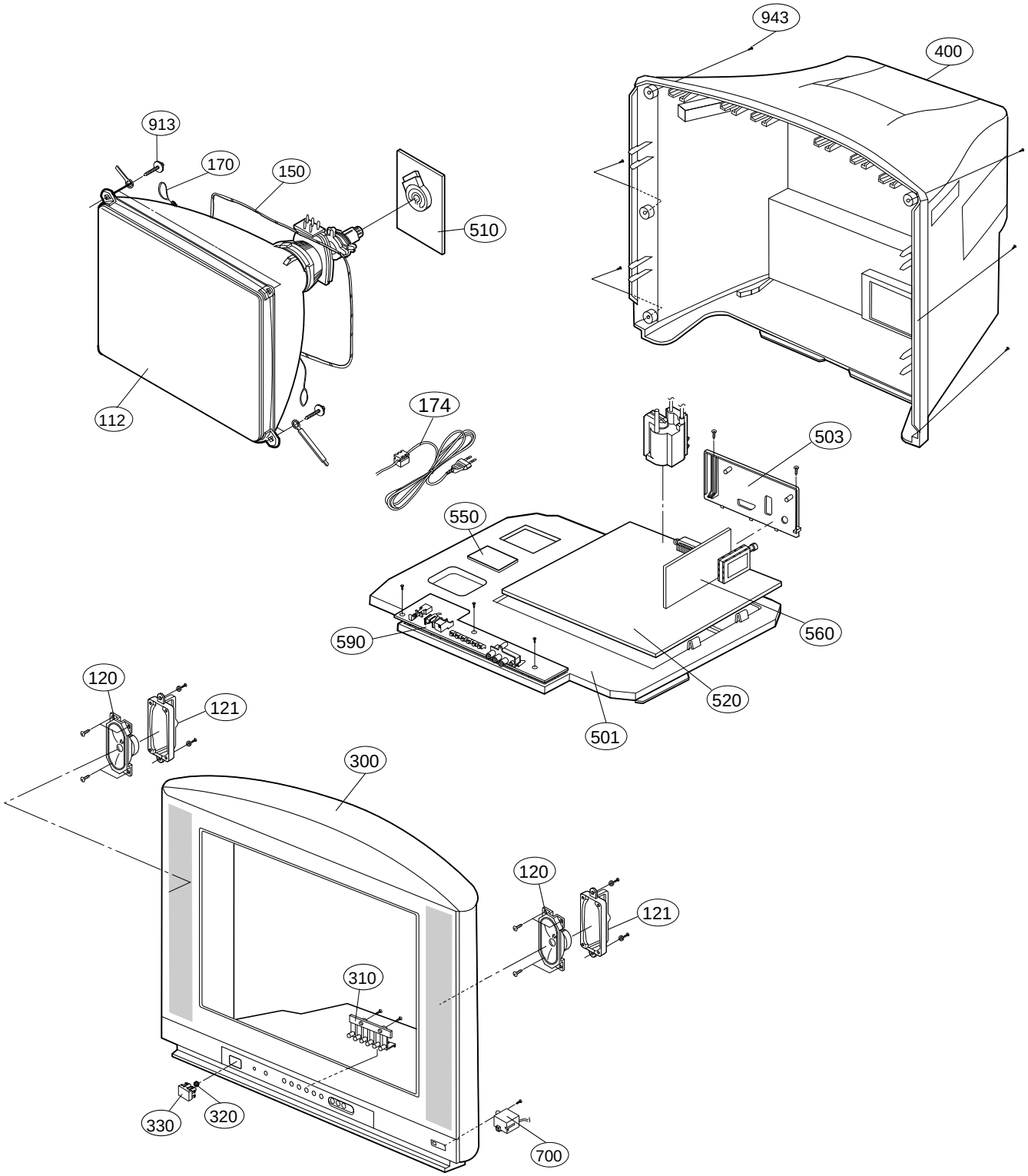


FRONT CONTROL



MEMO

EXPLODED VIEW



EXPLODED VIEW PARTS LIST

No.	PART NO.	DESCRIPTION
112	6335V29013B	CPT ASSEMBLY,A68QCP891X703 +0.4G[V] 0G[H] S/S SDIG 100HZ
120	120-C77G	SPEAKER,FULLRANGE,C122P02K1459 MOTOR JOY 8 OHM 10/15W 130 57*117
121	4810V00088B	BRACKET,SPEAKER CE-29K30 NON PP NONE
150	6140VC2005F	COIL,DEGAUSSING,29 FLAT ASSY (W) SELLA TECH 2001R+D07L
170	170-844K	CPT EARTH,29” 98T 4LUG LEAD SET SPRING(50MM)
174	174-322D	POWER CORD,POWER W/FILTER L=300(179B)VDE
300	3091V00523C	CABINET ASSEMBLY,RE-29FB51RQ STEREO MC036A LGEMA LOCAL
310	5020V00765A	BUTTON,CONTROL RE-29FB50 ABS, HF-380 6KEY MA LOCAL
320	320-075B	SPRING,COIL NON DIA:7.5MM, H:15.5MM NON NON
330	5020V00766A	BUTTON,POWER RE-29FB50 ABS, HF-380 1KEY MA LOCAL
400	3809V00366B	BACK COVER ASSEMBLY,RE-29FB51RX 2SCART MC036A
501	4810V00297J	BRACKET,MAIN W/HOLE MC021A HIPS 407AF SET
503	4810V00755A	BRACKET,REAR AV RT-29FB51 MC021A HIPS 51SF 2SCART,ONLY LGEMA
510	6871VSMX40B	PWB(PCB) ASSEMBLY,SUB CPT MC036A SS 29”” CPT”
520	6871VMMQ80J	PWB(PCB) ASSEMBLY,MAIN MC-036A RE-29FB51RQ.LPSLMI8 ITALYA
550	6871VSMX83A	PWB(PCB) ASSEMBLY,SUB MC036A 29FB51 REACTOR CKD
560	6871VSMX68F	PWB(PCB) ASSEMBLY,SUB MC036A RE-29FB51RQ.LPSLMI8 ITALYA
590	6871VSMX41B	PWB(PCB) ASSEMBLY,SUB POWER MC036A FB51 CTRL/SIDE A/V
700	0IGL120104A	IC,LG SEMICONDUCTOR,<None>CDS SENSOR MODULE(P1201-04)
913	332-229H	SCREW,DRAWING,NON - NON HEXAGON HEAD
943	1PTF0403116	SCREW,TAP TITE(P)[TRUSS HEAD

REPLACEMENT PARTS LIST

LOCA. NO	PART NO	DESCRIPTION
IC		
D850	0ISK100300A	IC, BK DIODE MODULE(RU4AM+FMLG12S) LF816
IC001	0ISM555000B	IC, SDA555XFL 52DIP ST FLASH MEMORY
IC002	0IAL241610B	IC, AT24C16A-10PI-2.7 8PIN DIP ST EEPROM NON
IC003	0IPH743200A	IC, 74HC32D 14SOP TP QUAD 2-INPUT OR GATE
IC012	0IFA754207A	IC, KA75420ZTA 3P,TO-92 TP 4.2V RESET IC
IC013	0IFA752700A	IC, KA75270Z 3 TP RE-SET IC MC-007
IC014	0IMCRUK002B	IC, S78DL33L AUK 3P, TO-92L TP 3.3V REGU.
IC015	0IMCRUK003A	IC, S5225M AUK 5SOP, SOT-25 R/TP 150MA L/D REG.
IC016	0IAL241610B	IC, AT24C16A-10PI-2.7 8PIN DIP ST EEPROM NON
IC101S	0IMCRMN021A	IC, VSP9412A VK B14 MICRONAS 80P MQFP R/TP
IC102	0IMCRSG011A	IC, LD1086V18 3DIP,TO-220 ST 1.5A-L/DROP REG.
IC102S	0ISO204000A	IC, CXA2040AQ 32P,QFP BK IIC BUS VIDEO S/W
IC103	0IMCRSG011A	IC, LD1086V18 3DIP,TO-220 ST 1.5A-L/DROP REG.
IC104	0ISG111733B	IC, LD1117V33C 3SIP ST REGULATOR -
IC301	0ISA784500A	IC, LA7845 7SIP V/OUT(1.5A) - - - -
IC401	0IKE455800E	IC, KIA4558 8DIP DUAL OP AMP
IC501	0IMCRMN024A	IC, DDP3315C QA G3 MICRONAS 80P QFP R/TP
IC501S	0IMCRMN024A	IC, DDP3315C QA G3 MICRONAS 80P QFP R/TP
IC503	0IKE780900M	IC, KIA7809API TO220 ST 3P 9V REGULATOR
IC504	0ISG111733B	IC, LD1117V33C 3SIP ST REGULATOR -
IC601	0IMCRMN011C	IC, MSP3410G PO B8 V3 52P DIP ST MC022A SOUND
IC650	0IFA754207A	IC, KA75420ZTA 3P,TO-92 TP 4.2V RESET IC
IC652	0ISG729700A	IC, TDA7297 15P,SIP BK 2CH 15W DUAL AMP
IC801	0IMCRSK001A	IC, STR-F6456R SANKEN 5PIN(LF1352) BK STR
IC802	0ILI817000G	IC, LTV817M-VB 4P,DIP BK PHOTO COUPLER
IC851	0IKE780500Q	IC, KIA7805API 3P TO-220 ST REGULATOR 5V
IC853	0ISS278120A	IC, KA278R12 4P,TO-220F BK LOW DROP 12V
IC853	0ISS278050A	IC, KA278R05 4P,TO-220F BK LOW DROP 5V
IC856	0ISK135000A	IC, SE135N(LF12) 3P 135V ERROR AMP - - - -
IC901	0IPH611190A	IC, TDA6111Q 9SIP RGB AMP - - - -
IC902	0IPH611190A	IC, TDA6111Q 9SIP RGB AMP - - - -
IC903	0IPH611190A	IC, TDA6111Q 9SIP RGB AMP - - - -
Q011	0IFA270000A	IC, 3P TP LEVEL SHIFT 60V/0.2A,MC007A
Q012	0IFA270000A	IC, 3P TP LEVEL SHIFT 60V/0.2A,MC007A
DIODE		
D011	0DD414809ED	DIODE, 1N4148 TP GRANDE - - - - - -
D012	0DD414809ED	DIODE, 1N4148 TP GRANDE - - - - - -
D160	0DD414809ED	DIODE, 1N4148 TP GRANDE - - - - - -
D160	0DD414809ED	DIODE, 1N4148 TP GRANDE - - - - - -
D161	0DD414809ED	DIODE, 1N4148 TP GRANDE - - - - - -
D161	0DD414809ED	DIODE, 1N4148 TP GRANDE - - - - - -
D2901	0DD414809ED	DIODE, 1N4148 TP GRANDE - - - - - -
D2902	0DD414809ED	DIODE, 1N4148 TP GRANDE - - - - - -
D2903	0DD414809ED	DIODE, 1N4148 TP GRANDE - - - - - -
D2906	0DD414809ED	DIODE, 1N4148 TP GRANDE - - - - - -
D2907	0DD414809ED	DIODE, 1N4148 TP GRANDE - - - - - -
D2909	0DD150009CA	DIODE, RGP15J TP LTD. - - - - - -
D2910	0DD150009CA	DIODE, RGP15J TP LTD. - - - - - -
D2911	0DD414809ED	DIODE, 1N4148 TP GRANDE - - - - - -
D301	0DD200009AF	DIODE, RU2M V(1) TP SANKEN

LOCA. NO	PART NO	DESCRIPTION
D339	0DD200009AF	DIODE, RU2M V(1) TP SANKEN
D349	0DD200009AF	DIODE, RU2M V(1) TP SANKEN
D351	0DD414809ED	DIODE, 1N4148 TP GRANDE - - - - - -
D402	0DD011150AA	DIODE, BK TO3PF 400V 5A 50A 0.3SEC 10UA
D410	0DD150009CA	DIODE, RGP15J TP LTD. - - - - - -
D413	0DD150009CC	DIODE, RGP15G TP LTD. - - - - - -
D414	0DD100009AE	DIODE, RU1A V(1) TP SANKEN
D425	0DD414809ED	DIODE, 1N4148 TP GRANDE - - - - - -
D505	0DD414809ED	DIODE, 1N4148 TP GRANDE - - - - - -
D506	0DD414809ED	DIODE, 1N4148 TP GRANDE - - - - - -
D507	0DD414809ED	DIODE, 1N4148 TP GRANDE - - - - - -
D802	0DD060009AC	DIODE, TVR06J TP - 600V - - 250NSEC -
D803	0DD100009AM	DIODE, EU1ZV(1) TP SANKEN
D804	0DD414809ED	DIODE, 1N4148 TP GRANDE - - - - - -
D851	0DD060009AC	DIODE, TVR06J TP - 600V - - 250NSEC -
D852	0DD060009AC	DIODE, TVR06J TP - 600V - - 250NSEC -
D853	0DD060009AC	DIODE, TVR06J TP - 600V - - 250NSEC -
D854	0DD060009AC	DIODE, TVR06J TP - 600V - - 250NSEC -
D855	0DD060009AC	DIODE, TVR06J TP - 600V - - 250NSEC -
D856	0DD414809ED	DIODE, 1N4148 TP GRANDE - - - - - -
D857	0DD414809ED	DIODE, 1N4148 TP GRANDE - - - - - -
D858	0DD420000BB	DIODE, D4L20U SHINDENGEN
D861	0DD060009AC	DIODE, TVR06J TP - 600V - - 250NSEC -
D866	0DD414809ED	DIODE, 1N4148 TP GRANDE - - - - - -
D900	0DR060009AA	DIODE, TVR06J TP LTD. DO41 600V 0.6A - - -
D903	0DR060009AA	DIODE, TVR06J TP LTD. DO41 600V 0.6A - - -
D909	0DR060009AA	DIODE, TVR06J TP LTD. DO41 600V 0.6A - - -
DB814	0DRGS00011A	DIODE, GSIB660 ST 5S 600V 6A 180A 100SEC 0.00001A
ZD012	0DZ910009AJ	DIODE, MTZJ9.1B TP ROHM-K DO34 0.5W 9.1V 5UA -
ZD102	0DZ330009BA	DIODE, ZENER HZT33 TAPING
ZD401	0DZ510009DB	DIODE, MTZJ5.1B TP ROHM-K DO34 - 5.1V 5UA -
ZD601	0DZ820009AH	DIODE, MTZJ8.2B TP ROHM-K DO34 - 8.2V 5UA -
ZD650	0DZ910009AJ	DIODE, MTZJ9.1B TP ROHM-K DO34 0.5W 9.1V 5UA -
TRANSISTOR		
IC2002	0TR165900AC	TR, KTA1659A-Y TO-220IS BK KEC - -
IC301	0TR205900AB	TR, KTD2059-Y TO-220IS KEC
Q015	0TR387500AA	TR, CHIP 2SC3875S(ALY) KEC
Q016	0TR387500AA	TR, CHIP 2SC3875S(ALY) KEC
Q018	0TR387500AA	TR, CHIP 2SC3875S(ALY) KEC
Q103	0TR945009AA	TR, KSC945C-Y SAMSUNG TP TO92 50V 150MA
Q104	0TR127009AA	TR, KTA1270-Y KEC TP TO92 50V 100MA
Q105	0TR945009AA	TR, KSC945C-Y SAMSUNG TP TO92 50V 150MA
Q108	0TR945009AA	TR, KSC945C-Y SAMSUNG TP TO92 50V 150MA
Q1101	0TR945009AA	TR, KSC945C-Y SAMSUNG TP TO92 50V 150MA
Q111	0TR945009AA	TR, KSC945C-Y SAMSUNG TP TO92 50V 150MA
Q161	0TR945009AA	TR, KSC945C-Y SAMSUNG TP TO92 50V 150MA
Q162	0TR733009AA	TR, KSA733C-Y TP SAMSUNG TO-92
Q163	0TR945009AA	TR, KSC945C-Y SAMSUNG TP TO92 50V 150MA
Q164	0TR733009AA	TR, KSA733C-Y TP SAMSUNG TO-92
Q165	0TR945009AA	TR, KSC945C-Y SAMSUNG TP TO92 50V 150MA
Q166	0TR733009AA	TR, KSA733C-Y TP SAMSUNG TO-92
Q167	0TR733009AA	TR, KSA733C-Y TP SAMSUNG TO-92

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LOCA. NO	PART NO	DESCRIPTION
Q168	0TR945009AA	TR, KSC945C-Y SAMSUNG TP TO92 50V 150MA
Q200	0TR733009AA	TR, KSA733C-Y TP SAMSUNG TO-92
Q240	0TR387500AA	TR, CHIP 2SC3875S(ALY) KEC
Q242	0TR387500AA	TR, CHIP 2SC3875S(ALY) KEC
Q243	0TR387500AA	TR, CHIP 2SC3875S(ALY) KEC
Q244	0TR387500AA	TR, CHIP 2SC3875S(ALY) KEC
Q245	0TR387500AA	TR, CHIP 2SC3875S(ALY) KEC
Q246	0TR387500AA	TR, CHIP 2SC3875S(ALY) KEC
Q2902	0TR319809AA	TR, KTC3198 KEC TP TO92 50V 150MA
Q2907	0TR126609AA	TR, KTA1266-Y KEC TP TO92 50V 150MA
Q2908	0TR319809AA	TR, KTC3198 KEC TP TO92 50V 150MA
Q2910	0TR437000BA	TR, KTC4370A-Y TO-220IS KEC
Q301	0TR945009AA	TR, KSC945C-Y SAMSUNG TP TO92 50V 150MA
Q301	0TR150400BA	TR, CHIP 2SA1504S(ASY) KEC
Q302	0TR733009AA	TR, KSA733C-Y TP SAMSUNG TO-92
Q302	0TR150400BA	TR, CHIP 2SA1504S(ASY) KEC
Q308	0TR945009AA	TR, KSC945C-Y SAMSUNG TP TO92 50V 150MA
Q401	0TF200000AA	TR, IRFIBC20G BK I.R 600V - -
Q402	0TRMA20001A	TR, 2SC5905 TRAY TOP-3L 1700V 20A
Q404	0TR127509AC	TR, KTA1275-Y TP(KTA1013),KEC
Q505	0TR387500AA	TR, CHIP 2SC3875S(ALY) KEC
Q506	0TR387500AA	TR, CHIP 2SC3875S(ALY) KEC
Q511	0TR387500AA	TR, CHIP 2SC3875S(ALY) KEC
Q512	0TR387500AA	TR, CHIP 2SC3875S(ALY) KEC
Q513	0TR127009AA	TR, KTA1270-Y KEC TP TO92 50V 100MA
Q513	0TR150400BA	TR, CHIP 2SA1504S(ASY) KEC
Q514	0TR387500AA	TR, CHIP 2SC3875S(ALY) KEC
Q515	0TR387500AA	TR, CHIP 2SC3875S(ALY) KEC
Q516	0TR127009AA	TR, KTA1270-Y KEC TP TO92 50V 100MA
Q516	0TR150400BA	TR, CHIP 2SA1504S(ASY) KEC
Q517	0TR387500AA	TR, CHIP 2SC3875S(ALY) KEC
Q518	0TR387500AA	TR, CHIP 2SC3875S(ALY) KEC
Q520	0TR150400BA	TR, CHIP 2SA1504S(ASY) KEC
Q520	0TR127009AA	TR, KTA1270-Y KEC TP TO92 50V 100MA
Q521	0TR387500AA	TR, CHIP 2SC3875S(ALY) KEC
Q523	0TR387500AA	TR, CHIP 2SC3875S(ALY) KEC
Q524	0TR127009AA	TR, KTA1270-Y KEC TP TO92 50V 100MA
Q524	0TR150400BA	TR, CHIP 2SA1504S(ASY) KEC
Q601	0TR733009AA	TR, KSA733C-Y TP SAMSUNG TO-92
Q602	0TR733009AA	TR, KSA733C-Y TP SAMSUNG TO-92
Q651	0TR945009AA	TR, KSC945C-Y SAMSUNG TP TO92 50V 150MA
Q852	0TR945009AA	TR, KSC945C-Y SAMSUNG TP TO92 50V 150MA
Q855	0TR421009AB	TR, BF421 TP TELEFUNKEN TO92 KEC
Q856	0TR102009AB	TR, KRC102M(KRC1202) KEC TP NA NA NA
Q857	0TR945009AA	TR, KSC945C-Y SAMSUNG TP TO92 50V 150MA
Q871	0TR945009AA	TR, KSC945C-Y SAMSUNG TP TO92 50V 150MA
Q900	0TR127109AA	TR, KTA1271Y KEC TP TO92 50V 100MA

CAPACITOR

C003	0CE106DF618	10UF STD 16V M FL TP5
C010	0CE226DD618	22UF STD 10V 20% FL TP 5
C011	0CE226DD618	22UF STD 10V 20% FL TP 5

LOCA. NO	PART NO	DESCRIPTION
C012	0CQ1041N509	0.1U 100V K POLY TP
C013	0CE477DD618	470UF STD 10V M FL TP5
C015	0CE106DF618	10UF STD 16V M FL TP5
C020	0CE476DD618	47UF STD 10V 20% FL TP 5
C021	0CE226DD618	22UF STD 10V 20% FL TP 5
C024	0CE226DD618	22UF STD 10V 20% FL TP 5
C030	0CE226DD618	22UF STD 10V 20% FL TP 5
C031	0CE226DD618	22UF STD 10V 20% FL TP 5
C036	0CE476DD618	47UF STD 10V 20% FL TP 5
C103	181-007G	MPE ECQ-V1H334JL3(TR), 50V 0.33UF J
C105	0CN1030F679	10000P 16V M Y TA52
C106	0CN1030F679	10000P 16V M Y TA52
C1102	0CE107DD618	100UF STD 10V M FL TP5
C1103	0CN1030F679	10000P 16V M Y TA52
C1104	0CE476DD618	47UF STD 10V 20% FL TP 5
C1130	0CQZVBK002D	A.C 275V 0.47UF K (S=22.5)
C114	0CE476DD618	47UF STD 10V 20% FL TP 5
C115	0CX4700K409	47P 50V J SL TA52
C116	0CX4700K409	47P 50V J SL TA52
C117	0CE227DD618	220UF STD 10V M FL TP5
C118	0CX4700K409	47P 50V J SL TA52
C119	0CX4700K409	47P 50V J SL TA52
C1201	0CE106DF618	10UF STD 16V M FL TP5
C1202	0CN2210K519	220P 50V K B TA52
C1203	0CN2210K519	220P 50V K B TA52
C121	0CE107DD618	100UF STD 10V M FL TP5
C121	0CE225DK618	2.2UF STD 50V 20% FL TP 5
C123	0CN1030F679	10000P 16V M Y TA52
C124	0CE106DF618	10UF STD 16V M FL TP5
C124	0CE107DD618	100UF STD 10V M FL TP5
C125	0CE108DD618	1000UF STD 10V M FL TP5
C126	0CE477DD618	470UF STD 10V M FL TP5
C126	0CE107DD618	100UF STD 10V M FL TP5
C126	0CE108DD618	1000UF STD 10V M FL TP5
C127	0CE476DD618	47UF STD 10V 20% FL TP 5
C129	0CE106DK618	10UF STD 50V M FL TP5
C133	0CE477DD618	470UF STD 10V M FL TP5
C133	0CE107DD618	100UF STD 10V M FL TP5
C135	0CE107DD618	100UF STD 10V M FL TP5
C136	0CE107DD618	100UF STD 10V M FL TP5
C137	0CE477DD618	470UF STD 10V M FL TP5
C137	0CE107DD618	100UF STD 10V M FL TP5
C138	0CE107DD618	100UF STD 10V M FL TP5
C161	0CN1010K519	100P 50V K B TA52
C162	0CN2210K519	220P 50V K B TA52
C163	0CE476DF618	47UF STD 16V M FL TP5
C164	0CN1040K949	0.1M 50V Z F TA52
C165	0CE105DK618	1UF STD 50V M FL TP5
C166	0CN1030F679	10000P 16V M Y TA52
C167	0CN1030F679	10000P 16V M Y TA52
C201	0CN1040K949	0.1M 50V Z F TA52
C202	0CX4700K409	47P 50V J SL TA52

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LOCA. NO	PART NO	DESCRIPTION
C206	0CE227DD618	220UF STD 10V M FL TP5
C206	0CE107DD618	100UF STD 10V M FL TP5
C207	0CE226DF618	22UF STD 16V M FL TP5
C208	0CE226DF618	22UF STD 16V M FL TP5
C212	0CN4710K519	470P 50V K B TA52
C213	0CN4710K519	470P 50V K B TA52
C214	0CN4710K519	470P 50V K B TA52
C220	0CE106DF618	10UF STD 16V M FL TP5
C221	0CN4710K519	470P 50V K B TA52
C222	0CN1010K519	100P 50V K B TA52
C228	0CE226DF618	22UF STD 16V M FL TP5
C229	0CE226DF618	22UF STD 16V M FL TP5
C241	0CE226DD618	22UF STD 10V 20% FL TP 5
C245	0CE106DF618	10UF STD 16V M FL TP5
C245	0CE226DD618	22UF STD 10V 20% FL TP 5
C248	0CE106DF618	10UF STD 16V M FL TP5
C248	0CE226DD618	22UF STD 10V 20% FL TP 5
C249	0CE226DD618	22UF STD 10V 20% FL TP 5
C252	0CE226DD618	22UF STD 10V 20% FL TP 5
C256	0CE106DF618	10UF STD 16V M FL TP5
C256	0CE226DD618	22UF STD 10V 20% FL TP 5
C258	0CE226DD618	22UF STD 10V 20% FL TP 5
C260	0CE336DF618	33UF STD 16V M FL TP5
C2903	0CE106DH618	10UF STD 25V M FL TP5
C2909	0CE106DH618	10UF STD 25V M FL TP5
C2910	0CN1010K519	100P 50V K B TA52
C2911	0CN1010K519	100P 50V K B TA52
C2912	0CK4720W510	4700P 500V K B S
C2913	0CK4720W510	4700P 500V K B S
C2914	0CE106DP618	10UF STD 160V M FL TP5
C2915	0CE107DK618	100UF STD 50V M FL TP5
C2917	0CE107DF618	100UF STD 16V M FL TP5
C2918	0CE107DF618	100UF STD 16V M FL TP5
C2919	0CE106DP618	10UF STD 160V M FL TP5
C2922	0CE106DH618	10UF STD 25V M FL TP5
C2933	0CK1010W515	100P 500V K B TS
C307	0CN1030F679	10000P 16V M Y TA52
C308	0CF4741L438	0.47UF D 63V 5% TP 5 M/PE NI
C310	0CE107BJ618	100UF KME 35V M FL TP5
C312	0CN2220F569	2200P 16V K X TA52
C313	0CQ3331N509	0.033U 100V K POLY TP
C316	0CE228DJ650	2200UF STD 35V M FM7.5 BULK
C331	0CQ1021N519	0.001U 100V K POLY NI TP
C333	0CN1020K519	1000P 50V K B TA52
C338	0CE228DH610	2200UF STD 25V M FL BULK
C339	0CK56101515	560P 1KV K B TS
C340	181-014Z	BUP 0.0033UF 1.6KV 5%,-5% FM 28.5*13.5*8.0
C348	0CE228BH61A	2200UF KME 25V M FL TP7.5
C350	0CK56101515	560P 1KV K B TS
C401	181-091D	DEHR33A102KN2A 1000PF 1KV 10%,-10% R/TP
C402	181-091D	DEHR33A102KN2A 1000PF 1KV 10%,-10% R/TP
C403	0CK22101515	220P 1KV K B TP5

LOCA. NO	PART NO	DESCRIPTION
C404	181-010A	PP 400V 0.022UF J
C405	181-011B	0.001UF D 1.6KV J M/PP NI FM20
C406	181-091D	DEHR33A102KN2A 1000PF 1KV 10%,-10% R/TP
C408	181-015K	MPP/NI 0.0091UF 1.6KV 3% FM 20MM
C409	181-038F	MPP 630V 0.027UF J
C411	181-013A	0.33UF 200V 5% FM MPP
C413	181-038D	MPP 400V 0.24MF J
C414	181-010E	PP 400V 0.12UF J
C415	181-013U	MPP 630V 0.1UF J
C416	0CE107DK618	100UF STD 50V M FL TP5
C417	0CK1030K945	0.01UF 50V Z F TR
C418	0CN6810K519	680P 50V K B TA52
C419	0CN1030F679	10000P 16V M Y TA52
C421	181-009V	PP 200V 0.047UF K
C423	0CE6851K652	6.8UF SM,SA 50V 20% FM7.5 BP(S)
C426	0CQ6831N509	0.068U 100V K POLY TP
C437	0CK56101515	560P 1KV K B TS
C438	0CE107DK618	100UF STD 50V M FL TP5
C440	181-091G	DEHR33D471KN3A 470PF 2KV 10%,-10% R/TP
C441	181-091G	DEHR33D471KN3A 470PF 2KV 10%,-10% R/TP
C442	0CQ5621N509	0.0056U 100V K POLY TP
C446	0CK56102515	560P 2KV K B TS
C447	0CE476DR618	47UF STD 250V 20% FL TP 5
C504	0CE476DD618	47UF STD 10V 20% FL TP 5
C506	0CE476DD618	47UF STD 10V 20% FL TP 5
C512	0CE476DF618	47UF STD 16V M FL TP5
C517	0CE227DF618	220UF STD 16V M FL TP5
C517	0CE476DF618	47UF STD 16V M FL TP5
C518	0CE227DF618	220UF STD 16V M FL TP5
C518	0CE476DF618	47UF STD 16V M FL TP5
C519	0CE227DF618	220UF STD 16V M FL TP5
C521	0CE476DD618	47UF STD 10V 20% FL TP 5
C523	0CE335DK618	3.3UF STD 50V 20% FL TP 5
C524	0CK224DF56A	220000PF 2012 16V 10% R/TP X7R
C525	0CK224DF56A	220000PF 2012 16V 10% R/TP X7R
C526	0CK224DF56A	220000PF 2012 16V 10% R/TP X7R
C527	181-007G	MPE ECQ-V1H334JL3(TR), 50V 0.33UF J
C527	0CK224DF56A	220000PF 2012 16V 10% R/TP X7R
C529	0CE477DD618	470UF STD 10V M FL TP5
C529	0CE476DD618	47UF STD 10V 20% FL TP 5
C601	0CE475DK618	4.7UF STD 50V 20% FL TP 5
C602	0CN3320F569	3300P 16V K X TA52
C603	0CN3320F569	3300P 16V K X TA52
C604	0CN2210K519	220P 50V K B TA52
C605	0CN1520F569	1500P 16V K X TA52
C606	0CE475DK618	4.7UF STD 50V 20% FL TP 5
C607	0CE475DK618	4.7UF STD 50V 20% FL TP 5
C610	0CE106DF618	10UF STD 16V M FL TP5
C611	0CN1030F679	10000P 16V M Y TA52
C612	0CN1030F679	10000P 16V M Y TA52
C613	0CE107DD618	100UF STD 10V M FL TP5
C614	0CN1030F679	10000P 16V M Y TA52

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LOCA. NO	PART NO	DESCRIPTION
C615	0CX5600K409	56P 50V J SL TA52
C617	0CN1040K949	0.1M 50V Z F TA52
C618	181-007G	MPE ECQ-V1H334JL3(TR), 50V 0.33UF J
C619	181-007G	MPE ECQ-V1H334JL3(TR), 50V 0.33UF J
C620	181-442Z	PE,ECQ-B1H104KF3(TR)
C621	0CN1030F679	10000P 16V M Y TA52
C622	0CN1020K519	1000P 50V K B TA52
C623	0CE106DF618	10UF STD 16V M FL TP5
C624	0CE476DD618	47UF STD 10V 20% FL TP 5
C625	0CX5600K409	56P 50V J SL TA52
C626	0CN4710K519	470P 50V K B TA52
C627	0CX5600K409	56P 50V J SL TA52
C628	0CC0200K115	2P 50V D NP0 TS
C629	0CC0200K115	2P 50V D NP0 TS
C630	0CN1030F679	10000P 16V M Y TA52
C631	0CX5600K409	56P 50V J SL TA52
C632	0CE476DF618	47UF STD 16V M FL TP5
C633	0CN2720F569	2700P 16V K X TA52
C634	0CN2720F569	2700P 16V K X TA52
C635	0CN2720F569	2700P 16V K X TA52
C636	0CN2720F569	2700P 16V K X TA52
C637	0CN1030F679	10000P 16V M Y TA52
C638	0CN1030F679	10000P 16V M Y TA52
C639	181-442Z	PE,ECQ-B1H104KF3(TR)
C640	181-442Z	PE,ECQ-B1H104KF3(TR)
C650	0CE108DH618	1000UF STD 25V M FL TP5
C651	0CN2230H949	22000P 25V Z FTA52
C652	0CQ2242K439	0.22UF S 50V 5% M/PE NI TP5
C653	0CN3320F569	3300P 16V K X TA52
C655	0CQ2242K439	0.22UF S 50V 5% M/PE NI TP5
C656	0CN3320F569	3300P 16V K X TA52
C657	0CE336DD618	33UF STD 10V 20% FL TP 5
C660	181-007G	MPE ECQ-V1H334JL3(TR), 50V 0.33UF J
C661	181-007G	MPE ECQ-V1H334JL3(TR), 50V 0.33UF J
C662	181-007G	MPE ECQ-V1H334JL3(TR), 50V 0.33UF J
C663	181-007G	MPE ECQ-V1H334JL3(TR), 50V 0.33UF J
C801	0CE477DH618	470UF STD 25V M FL TP5
C803	181-091G	DEHR33D471KN3A 470PF 2KV 10%,-10% R/TP
C806	181-014Y	MPP 1.6KV 0.0015UF J
C807	181-091C	DEHR33A471KN2A 470PF 1KV 10%,-10% R/TP
C808	0CE107BJ618	100UF KME 35V M FL TP5
C809	0CK1020K515	1000P 50V K B TS
C811	181-120K	2200PF 4KV M E FMTW LEAD 4.5
C812	0CK1020K515	1000P 50V K B TS
C813	181-091D	DEHR33A102KN2A 1000PF 1KV 10%,-10% R/TP
C814	0CQZVBK002A	A.C 275V 0.1UF M (S=15)
C815	181-091C	DEHR33A471KN2A 470PF 1KV 10%,-10% R/TP
C816	181-091D	DEHR33A102KN2A 1000PF 1KV 10%,-10% R/TP
C821	181-001Y	330UF 0 450V M VNSN BULK
C824	0CQZVBK002C	A.C 275V 0.22UF K (S=22.5)
C851	0CK1020K515	1000P 50V K B TS
C853	0CE108DF618	1000UF STD 16V M FL TP5

LOCA. NO	PART NO	DESCRIPTION
C855	0CE477DD618	470UF STD 10V M FL TP5
C856	181-091C	DEHR33A471KN2A 470PF 1KV 10%,-10% R/TP
C857	0CE228DF618	2200UF STD 16V M FL TP5
C858	0CE108DF618	1000UF STD 16V M FL TP5
C859	181-091C	DEHR33A471KN2A 470PF 1KV 10%,-10% R/TP
C861	0CE108DF618	1000UF STD 16V M FL TP5
C862	0CE475CK636	4.7UF SHL,SD 50V 20% FM5 BP(D) TP
C863	181-091C	DEHR33A471KN2A 470PF 1KV 10%,-10% R/TP
C864	0CE108BH618	1000UF KME 25V M FL TP5
C866	0CK4710W515	470PF 500V K B TR
C867	0CE107DN618	100UF STD 100V M FL TP5
C868	0CE227DD618	220UF STD 10V M FL TP5
C869	0CE106DH618	10UF STD 25V M FL TP5
C870	181-091D	DEHR33A102KN2A 1000PF 1KV 10%,-10% R/TP
C871	0CE227DP61A	220UF STD 160V 20% FL TP 7.5
C872	0CE227DP61A	220UF STD 160V 20% FL TP 7.5
C873	0CQ1041N509	0.1U 100V K POLY TP
C875	0CE108DF618	1000UF STD 16V M FL TP5
C900	0CE475BR618	4.7UF KME TYPE 250V 20% FL TP 5
C901	0CE475BR618	4.7UF KME TYPE 250V 20% FL TP 5
C902	0CE475DR618	4.7UF STD 250V 20% FL TP 5
C903	0CC0500K115	5P 50V D NP0 TS
C904	0CE475BR618	4.7UF KME TYPE 250V 20% FL TP 5
C905	0CK5610W515	560P 500V K B TS
C906	0CN1040K949	0.1M 50V Z F TA52
C907	0CN1040K949	0.1M 50V Z F TA52
C910	0CE225DK618	2.2UF STD 50V 20% FL TP 5
C911	0CN1040K949	0.1M 50V Z F TA52
C912	0CN1040K949	0.1M 50V Z F TA52
C914	0CE228DF618	2200UF STD 16V M FL TP5
C915	0CK5610W515	560P 500V K B TS
C916	181-033T	2KV B 222K TP7.5
C917	0CN1040K949	0.1M 50V Z F TA52
C918	0CC0500K115	5P 50V D NP0 TS
C919	0CK5610W515	560P 500V K B TS
C920	0CC5600K415	56P 50V J NP0 TP
C925	0CN1040K949	0.1M 50V Z F TA52
C927	0CC4700K415	47P 50V J NP0 TP
C928	0CC3300K415	33P 50V J NP0 TP

COIL & INDUCTOR

L010	0LC1032101A	INDUCTOR,CHIP10UH 10% 3216 R/TC FI-
L011	0LC1032101A	INDUCTOR,CHIP 10UH 10% 3216 R/TC FI-
L012	0LC1032101A	INDUCTOR,CHIP 10UH 10% 3216 R/TC FI-
L013	0LC1032101A	INDUCTOR,CHIP 10UH 10% 3216 R/TC FI-
L014	0LC1032101A	INDUCTOR,CHIP 10UH 10% 3216 R/TC FI-
L015	0LC1032101A	INDUCTOR,CHIP 10UH 10% 3216 R/TC FI-
L101	0LC1032101A	INDUCTOR,CHIP 10UH 10% 3216 R/TC FI-
L102	0LC1032101A	INDUCTOR,CHIP 10UH 10% 3216 R/TC FI-
L1101	0LA0102K119	INDUCTOR,AXIAL LEAD 10UH K 2.3*3.4 TP
L1201	0LA0472K119	INDUCTOR,AXIAL LEAD 47UH K 2.3*3.4 TP
L1202	0LA0472K119	INDUCTOR,AXIAL LEAD 47UH K 2.3*3.4 TP

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LOCA. NO	PART NO	DESCRIPTION
L204	0LA0102K119	INDUCTOR,AXIAL LEAD 10UH K 2.3*3.4 TP
L205	0LA0102K119	INDUCTOR,AXIAL LEAD 10UH K 2.3*3.4 TP
L206	0LA0102K119	INDUCTOR,AXIAL LEAD 10UH K 2.3*3.4 TP
L207	0LA0102K119	INDUCTOR,AXIAL LEAD 10UH K 2.3*3.4 TP
L209	0LC1032101A	INDUCTOR,CHIP 10UH 10% 3216 R/TC FI-
L211	0LC1032101A	INDUCTOR,CHIP 10UH 10% 3216 R/TC FI-
L213	0LC1032101A	INDUCTOR,CHIP 10UH 10% 3216 R/TC FI-
L215	0LC1032101A	INDUCTOR,CHIP 10UH 10% 3216 R/TC FI-
L241	0LC0233002A	INDUCTOR,CHIP 3.3UH CERATECH R/TP
L401	150-L02Q	COIL,LINEARITY 10UH PHY TURN
L402	150-C13B	COIL,CHOKE 52UH PHY TURN
L403	150-C13B	COIL,CHOKE 52UH PHY TURN
L404	150-W01A	COIL,CHOKE WIDTH 24UH
L407	150-717K	COIL,CHOKE 1.1UH PHY TURN
L510	0LC1032101A	INDUCTOR,CHIP 10UH 10% 3216 R/TC FI-
L511	0LC1032101A	INDUCTOR,CHIP 10UH 10% 3216 R/TC FI-
L512	0LC1032101A	INDUCTOR,CHIP 10UH 10% 3216 R/TC FI-
L513	0LC1032101A	INDUCTOR,CHIP 10UH 10% 3216 R/TC FI-
L603	0LA0102K119	INDUCTOR,AXIAL LEAD 10UH K 2.3*3.4 TP
L605	0LA0102K119	INDUCTOR,AXIAL LEAD 10UH K 2.3*3.4 TP
L853	150-C02F	COIL,CHOKE 82UH PHY TURN
L901	0LA0272K139	INDUCTOR,AXIAL LEAD 27UH K 4X10.5 TP
T401	6170VC0002A	TRANSFORMER,HORIZONTAL DRIVER H-DRIVE EER-2619
T403	151-E06A	TRANSFORMER,POWEREER2834 0UH
T801	6170VZ0008A	TRANSFORMER,HORIZONTAL DRIVER TS4841 30500UH REACTOR
T802	6170VMCC01G	TRANSFORMER,SMPS[COIL]EER5345 410UH MC-036A
T803	151-D02G	TRANSFORMER,STAND-BYEER3541 0UH
CONNECTOR		
G18	387-907F	CONNECTOR, 1P NON 350MM R-H UL 1617 AWG 22
G19	387-907F	CONNECTOR, 1P NON 350MM R-H UL 1617 AWG 22
P012	366-922B	CONNECTOR, 2.5MM 3P GIL-G LG CABLE R/A
P013	366-932B	CONNECTOR, 2.5MM 3P GIL-G LG CABLE S
P06B	366-932C	CONNECTOR, 2.5MM 4P GIL-G LG CABLE S
P07B	387-A08K	CONNECTOR, 8P 2.5MM 600MM H-B UL1007 AWG26
P08B	366-921G	CONNECTOR, 2.5MM 8P GIL-G LG CABLE .
P1001B	387-G04K	CONNECTOR, 4P GIL-G TO GIL-G(600)
P101A	366-932E	CONNECTOR, 2.5MM 6P GIL-G LG CABLE S
P102	366-009D	CONNECTOR, 2.36PAI 1P . K/M AUTO
P1101A	366-009D	CONNECTOR, 2.36PAI 1P . K/M AUTO
P1101B	366-009D	CONNECTOR, 2.36PAI 1P . K/M AUTO
P1101B	366-922C	CONNECTOR, 2.5MM 4P GIL-G LG CABLE R/A
P1103A	366-009D	CONNECTOR, 2.36PAI 1P . K/M AUTO
P1103B	366-009D	CONNECTOR, 2.36PAI 1P . K/M AUTO
P1151B	366-922G	CONNECTOR, 2.5MM 8P GIL-G LG CABLE R/A
P1201B	366-922G	CONNECTOR, 2.5MM 8P GIL-G LG CABLE R/A
P1203B	366-922G	CONNECTOR, 2.5MM 8P GIL-G LG CABLE R/A
P201B	366-173L	CONNECTOR, 2.5MM 12*2P AEPH-254 A/K R/N
P202B	366-173L	CONNECTOR, 2.5MM 12*2P AEPH-254 A/K R/N
P203B	366-173L	CONNECTOR, 2.5MM 12*2P AEPH-254 A/K R/N
P204B	366-173L	CONNECTOR, 2.5MM 12*2P AEPH-254 A/K R/N
P2903	366-932B	CONNECTOR, 2.5MM 3P GIL-G LG CABLE S

LOCA. NO	PART NO	DESCRIPTION
P401	366-043K	CONNECTOR, PLUG(4P)
P650	366-932C	CONNECTOR, 2.5MM 4P GIL-G LG CABLE S
P651	366-932B	CONNECTOR, 2.5MM 3P GIL-G LG CABLE S
P803A	366-009D	CONNECTOR, 2.36PAI 1P . K/M AUTO
P803B	366-009D	CONNECTOR, 2.36PAI 1P . K/M AUTO
P822A	366-009D	CONNECTOR, 2.36PAI 1P . K/M AUTO
P822B	366-009D	CONNECTOR, 2.36PAI 1P . K/M AUTO
P823	366-009D	CONNECTOR, 2.36PAI 1P . K/M AUTO
P824	366-009D	CONNECTOR, 2.36PAI 1P . K/M AUTO
P901A	366-921L	CONNECTOR, 2.5MM 12P GIL-G LG CABLE .
P901B	366-922L	CONNECTOR, 2.5MM 12P GIL-G LG CABLE R/A
P902A	366-921J	CONNECTOR, 2.5MM 10P GIL-G LG CABLE .
P902B	387-A10G	CONNECTOR, 10P 2.5MM 400MM H-B UL1007 AWG26
P905	366-009D	CONNECTOR, 2.36PAI 1P . K/M AUTO
P906	366-009D	CONNECTOR, 2.36PAI 1P . K/M AUTO
RESISTOR		
AR101	0RRZVTA001D	22 OHM 1 / 16 W 1608 5% R/TP 4P E24 SERIES
AR102	0RRZVTA001D	22 OHM 1 / 16 W 1608 5% R/TP 4P E24 SERIES
F851	0RP0020J809	0.02 OHM 1 W 20% TA52
F855	0RP0050H709	0.05 OHM 1/2 W 10% TA52
F856	0RP0020J809	0.02 OHM 1 W 20% TA52
FB854	0RF0470H609	0.47 OHM 1/2 W 5.00% TA52
FR2948	0RF1000H609	100 OHM 1/2 W 5.00% TA52
FR359	0RP0050H709	0.05 OHM 1/2 W 10% TA52
FR360	0RP0050H709	0.05 OHM 1/2 W 10% TA52
FR443	0RP0050H709	0.05 OHM 1/2 W 10% TA52
FR448	0RP0050H709	0.05 OHM 1/2 W 10% TA52
J127	0RN1201F409	1.2K OHM 1/6 W 1.00% TA52
R110	0RS0102K607	10 OHM 2 W 5.00% TA62
R1101	0RD4702F609	47K OHM 1/6 W 5% TA52
R1102	0RD1501F609	1.5K OHM 1/6 W 5% TA52
R1103	0RD3300F609	330 OHM 1/6 W 5.00% TA52
R1104	0RD0102F609	10 OHM 1/6 W 5% TA52
R111	0RD1001F609	1K OHM 1/6 W 5% TA52
R111	0RS0102K607	10 OHM 2 W 5.00% TA62
R112	0RD1002F609	10K OHM 1/6 W 5% TA52
R112	0RS0102K607	10 OHM 2 W 5.00% TA62
R113	0RD0102F609	10 OHM 1/6 W 5% TA52
R113	0RS0102K607	10 OHM 2 W 5.00% TA62
R1130	0RKZVTA001K	0.47M OHM 1/2 W 5% TA52 PILKOR
R1151	0RD1000F609	100 OHM 1/6 W 5% TA52
R1152	0RD1000F609	100 OHM 1/6 W 5% TA52
R1153	0RD1000F609	100 OHM 1/6 W 5% TA52
R1154	0RD1000F609	100 OHM 1/6 W 5% TA52
R1155	0RD1000F609	100 OHM 1/6 W 5% TA52
R116	0RD1002F609	10K OHM 1/6 W 5% TA52
R117	0RD2201F609	2.2K OHM 1/6 W 5.00% TA52
R119	0RD0102F609	10 OHM 1/6 W 5% TA52
R1201	0RD2403F609	240K OHM 1/6 W 5.00% TA52
R1203	0RD2403F609	240K OHM 1/6 W 5.00% TA52
R1204	0RD0752F609	75 OHM 1/6 W 5.00% TA52

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LOCA. NO	PART NO	DESCRIPTION
R125	0RD1000F609	100 OHM 1/6 W 5% TA52
R126	0RD1000F609	100 OHM 1/6 W 5% TA52
R127	0RD1000F609	100 OHM 1/6 W 5% TA52
R128	0RD0222F609	22 OHM 1/6 W 5.00% TA52
R129	0RD1000F609	100 OHM 1/6 W 5% TA52
R130	0RD1000F609	100 OHM 1/6 W 5% TA52
R131	0RD2200F609	220 OHM 1/6 W 5.00% TA52
R132	0RD2200F609	220 OHM 1/6 W 5.00% TA52
R133	0RD2400F609	240 OHM 1/6 W 5.00% TA52
R134	0RD1001F609	1K OHM 1/6 W 5% TA52
R135	0RS1801H609	1.8K OHM 1/2 W 5.00% TA52
R136	0RD1002F609	10K OHM 1/6 W 5% TA52
R137	0RD1002F609	10K OHM 1/6 W 5% TA52
R138	0RD0102F609	10 OHM 1/6 W 5% TA52
R160	0RD1001F609	1K OHM 1/6 W 5% TA52
R161	0RD3002F609	30K OHM 1/6 W 5.00% TA52
R162	0RD1002F609	10K OHM 1/6 W 5% TA52
R163	0RD1003F609	100K OHM 1/6 W 5% TA52
R164	0RD1801F609	1.8K OHM 1/6 W 5.00% TA52
R165	0RD1801F609	1.8K OHM 1/6 W 5.00% TA52
R166	0RD4701F609	4.7K OHM 1/6 W 5% TA52
R167	0RD4701F609	4.7K OHM 1/6 W 5% TA52
R168	0RD4701F609	4.7K OHM 1/6 W 5% TA52
R169	0RD5602F609	56K OHM 1/6 W 5% TA52
R170	0RD2202F609	22K OHM 1/6 W 5% TA52
R171	0RD5103F609	510K OHM 1/6 W 5.00% TA52
R172	0RD5602F609	56K OHM 1/6 W 5% TA52
R173	0RD1000F609	100 OHM 1/6 W 5% TA52
R200	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R201	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R202	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R208	0RD1000F609	100 OHM 1/6 W 5% TA52
R211	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R218	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R219	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R220	0RD2200F609	220 OHM 1/6 W 5.00% TA52
R220	0RD1001F609	1K OHM 1/6 W 5% TA52
R2906	0RD1500F609	150 OHM 1/6 W 5.00% TA52
R2907	0RD1600F609	160 OHM 1/6 W 5.00% TA52
R2908	0RD3001F609	3K OHM 1/6 W 5.00% TA52
R2909	0RD1500F609	150 OHM 1/6 W 5.00% TA52
R2910	0RD3001F609	3K OHM 1/6 W 5.00% TA52
R2911	0RD5601F609	5.6K OHM 1/6 W 5% TA52
R2912	0RD3001F609	3K OHM 1/6 W 5.00% TA52
R2921	0RD3000H609	300 OHM 1/2 W 5.00% TA52
R2922	0RD3000H609	300 OHM 1/2 W 5.00% TA52
R2928	0RD0102F609	10 OHM 1/6 W 5% TA52
R2929	0RD1000F609	100 OHM 1/6 W 5% TA52
R2930	0RD0102F609	10 OHM 1/6 W 5% TA52
R2931	0RD1000F609	100 OHM 1/6 W 5% TA52
R2932	0RD0822F609	82 OHM 1/6 W 5.00% TA52
R2933	0RD0822F609	82 OHM 1/6 W 5.00% TA52

LOCA. NO	PART NO	DESCRIPTION
R2934	0RF0102J607	10 OHM 1 W 5.00% TA62
R2935	0RD1202H609	12K OHM 1/2 W 5.00% TA52
R2936	0RD2001H609	2K OHM 1/2 W 5.00% TA52
R2937	0RD5602H609	56K OHM 1/2 W 5.00% TA52
R2938	0RD5602H609	56K OHM 1/2 W 5.00% TA52
R2939	0RD1201H609	1.2K OHM 1/2 W 5.00% TA52
R2940	0RD1501H609	1.5K OHM 1/2 W 5.00% TA52
R2941	0RD1501H609	1.5K OHM 1/2 W 5.00% TA52
R2942	0RD0391H609	3.9 OHM 1/2 W 5.00% TA52
R2943	0RD0562H609	56 OHM 1/2 W 5.00% TA52
R2944	0RD0391H609	3.9 OHM 1/2 W 5.00% TA52
R2945	0RD0562H609	56 OHM 1/2 W 5.00% TA52
R2946	0RS8200J607	820 OHM 1 W 5.00% TA62
R2947	0RS8200J607	820 OHM 1 W 5.00% TA62
R2955	0RD2202H609	22K OHM 1/2 W 5.00% TA52
R2959	0RD5101F609	5.1K OHM 1/6 W 5.00% TA52
R2990	0RD0222F609	22 OHM 1/6 W 5.00% TA52
R311	0RD1002F609	10K OHM 1/6 W 5% TA52
R312	0RD2202F609	22K OHM 1/6 W 5% TA52
R313	0RD1001F609	1K OHM 1/6 W 5% TA52
R314	0RD3001F609	3K OHM 1/6 W 5.00% TA52
R318	0RS0331K619	3.3 OHM 2 W 5% TR
R324	0RD1001F609	1K OHM 1/6 W 5% TA52
R325	0RD1000F609	100 OHM 1/6 W 5% TA52
R326	0RN1201F409	1.2K OHM 1/6 W 1.00% TA52
R327	0RN2701F409	2.7K OHM 1/6 W 1.00% TA52
R328	0RS3300K607	330 OHM 2 W 5.00% TA62
R329	0RN0221J607	2.2 OHM 1 W 5.00% TA62
R330	0RN0221J607	2.2 OHM 1 W 5.00% TA62
R331	0RN1001F409	1K OHM 1/6 W 1.00% TA52
R332	0RD1000F609	100 OHM 1/6 W 5% TA52
R334	0RD1002F609	10K OHM 1/6 W 5% TA52
R335	0RD1000F609	100 OHM 1/6 W 5% TA52
R401	0RD1002F609	10K OHM 1/6 W 5% TA52
R403	0RS1001J607	1K OHM 1 W 5.00% TA62
R404	0RS4701K619	4.7K OHM 2 W 5% TR
R405	180-A01B	RW ROUND G 2W 0.11 K TA31(63)
R406	0RS0561K619	5.6 OHM 2 W 5% TR
R407	0RS1501K607	1.5K OHM 2 W 5.00% TA62
R410	0RD3301F609	3.3K OHM 1/6 W 5.00% TA52
R413	0RN4701F409	4.7K OHM 1/6 W 1.00% TA52
R414	0RD6802F609	68K OHM 1/6 W 5.00% TA52
R415	0RD1000F609	100 OHM 1/6 W 5% TA52
R416	0RN4702F409	47K OHM 1/6 W 1.00% TA52
R417	0RD4700F609	470 OHM 1/6 W 0.05 TA52
R418	0RD2001A609	2K OHM 1/2 W(7.0) 5.00% TA52
R419	0RN1501F409	1.5K OHM 1/6 W 1.00% TA52
R420	0RD1001F609	1K OHM 1/6 W 5% TA52
R421	0RD0221F609	2.2 OHM 1/6 W 5.00% TA52
R422	0RD1001A609	1K OHM 1/2 W(7.0) 5.00% TA52
R423	0RD2701A609	2.7K OHM 1/2 W(7.0) 5.00% TA52
R424	0RS0561K607	5.6 OHM 2 W 5.00% TA62

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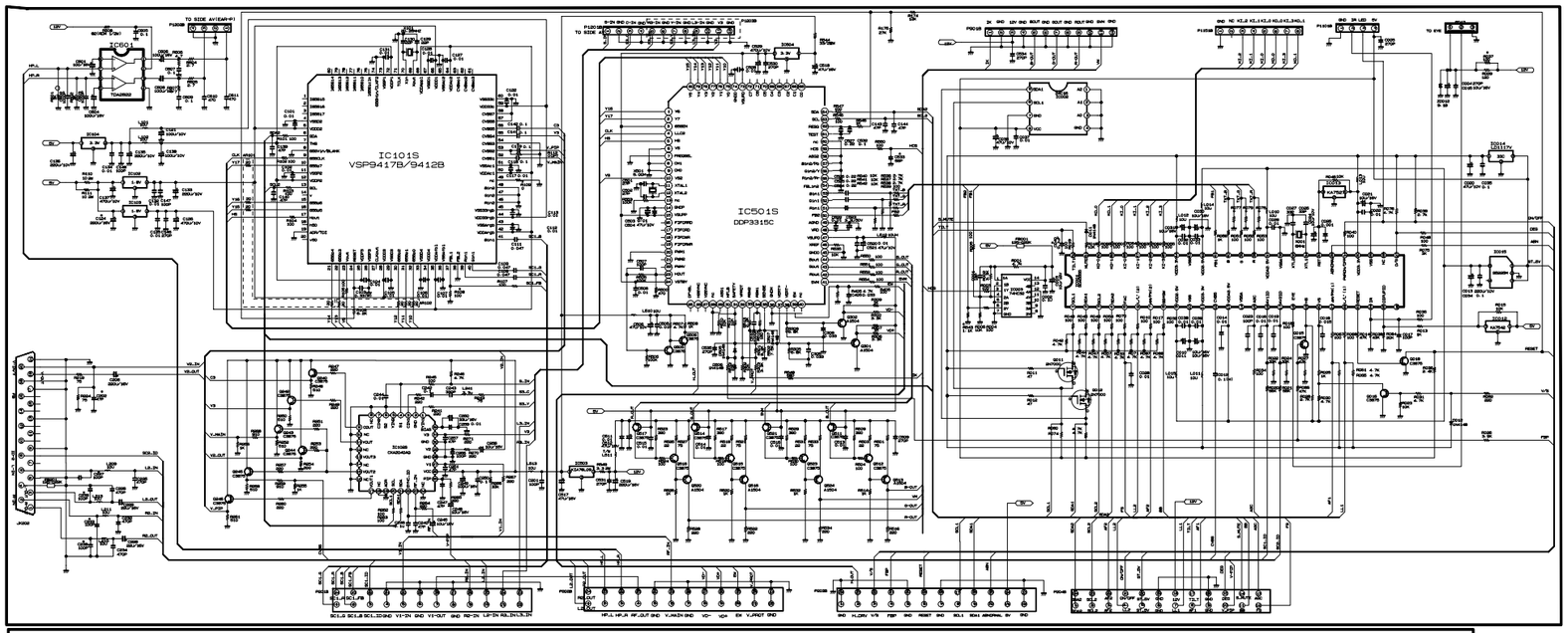
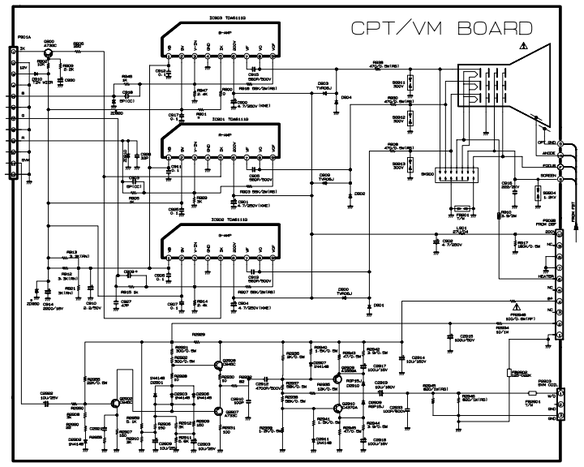
LOCA. NO	PART NO	DESCRIPTION
R425	0RD2400A609	240 OHM 1/2 W(7.0) 5.00% TA52
R427	0RD1001A609	1K OHM 1/2 W(7.0) 5.00% TA52
R430	0RS1001H609	1K OHM 1/2 W 5.00% TA52
R431	0RS6802H609	68K OHM 1/2 W 5.00% TA52
R432	0RD3903F609	390K OHM 1/6 W 5.00% TA52
R434	0RS3901H609	3.9K OHM 1/2 W 5.00% TA52
R450	0RD0221A609	2.2 OHM 1/2 W(7.0) 5.00% TA52
R451	180-C02M	5.6K OHM 1/2 W 10% TA52 ERC12GK562V
R452	0RS0101J607	1 OHM 1 W 5.00% TA62
R490	180-B01E	RS RECT S 5W 15K J DOUBLE
R544	0RS0332K607	33 OHM 2 W 5.00% TA62
R549	0RS0331K607	3.3 OHM 2 W 5.00% TA62
R601	0RD3601F609	3.6K OHM 1/6 W 5.00% TA52
R602	0RD3601F609	3.6K OHM 1/6 W 5.00% TA52
R611	0RD0102F609	10 OHM 1/6 W 5% TA52
R612	0RD1000F609	100 OHM 1/6 W 5% TA52
R613	0RD1000F609	100 OHM 1/6 W 5% TA52
R614	0RD3302F609	33K OHM 1/6 W 5% TA52
R615	0RD3302F609	33K OHM 1/6 W 5% TA52
R623	0RD1000F609	100 OHM 1/6 W 5% TA52
R624	0RD1000F609	100 OHM 1/6 W 5% TA52
R636	0RD1001F609	1K OHM 1/6 W 5% TA52
R637	0RD1001F609	1K OHM 1/6 W 5% TA52
R651	0RD3001F609	3K OHM 1/6 W 5.00% TA52
R652	0RD4301F609	4.3K OHM 1/6 W 5.00% TA52
R654	0RD4702F609	47K OHM 1/6 W 5% TA52
R656	0RD4301F609	4.3K OHM 1/6 W 5.00% TA52
R657	0RD1001F609	1K OHM 1/6 W 5% TA52
R658	0RD1001F609	1K OHM 1/6 W 5% TA52
R659	0RD1001F609	1K OHM 1/6 W 5% TA52
R660	0RD4702F609	47K OHM 1/6 W 5% TA52
R661	0RD3001F609	3K OHM 1/6 W 5.00% TA52
R663	0RD1002F609	10K OHM 1/6 W 5% TA52
R664	0RD2701F609	2.7K OHM 1/6 W 5% TA52
R665	0RD2001A609	2K OHM 1/2 W(7.0) 5.00% TA52
R668	0RD1001F609	1K OHM 1/6 W 5% TA52
R669	0RD1001F609	1K OHM 1/6 W 5% TA52
R680	0RD3000A609	300 OHM 1/2 W(7.0) 5.00% TA52
R803	0RD0201A609	2 OHM 1/2 W(7.0) 5.00% TA52
R804	0RD4701F609	4.7K OHM 1/6 W 5% TA52
R805	0RD1001F609	1K OHM 1/6 W 5% TA52
R806	180-A01P	0.13 OHM 2 W 5% TA62 RWR
R807	0RKZVTA001C	8.2M OHM 1/2 W 5% TA52 UL PILKOR
R808	0RD3001F609	3K OHM 1/6 W 5.00% TA52
R809	0RS2402K607	24K OHM 2 W 5.00% TA62
R810	0RS2402K619	24K OHM 2 W 5% TR
R832	0RD1600F609	160 OHM 1/6 W 5.00% TA52
R833	0RD2203A609	220K OHM 1/2 W(7.0) 5.00% TA52
R852	0RS0102K607	10 OHM 2 W 5.00% TA62
R853	0RD4701F609	4.7K OHM 1/6 W 5% TA52
R854	0RD4702F609	47K OHM 1/6 W 5% TA52

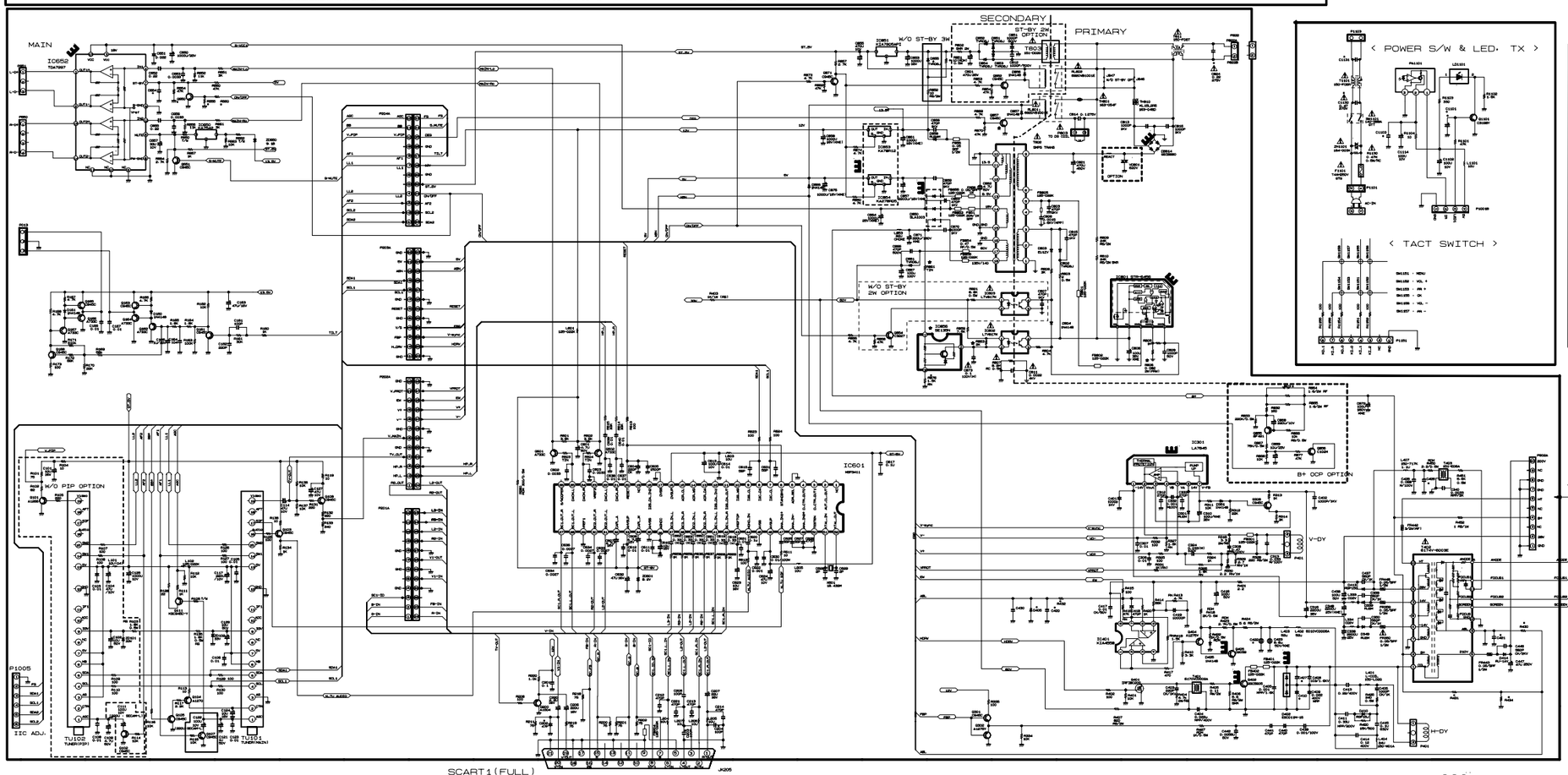
LOCA. NO	PART NO	DESCRIPTION
R855	0RD4701F609	4.7K OHM 1/6 W 5% TA52
R857	0RD2701F609	2.7K OHM 1/6 W 5% TA52
R859	0RD7501F609	7.5K OHM 1/6 W 5.00% TA52
R860	0RD4701F609	4.7K OHM 1/6 W 5% TA52
R862	0RD4702F609	47K OHM 1/6 W 5% TA52
R863	0RD2001F609	2K OHM 1/6 W 5% TA52
R864	0RF0161K607	1.6 OHM 2 W 5.00% TA62
R865	0RF0161K607	1.6 OHM 2 W 5.00% TA62
R866	0RS1002H609	10K OHM 1/2 W 5.00% TA52
R867	0RD7502A609	75K OHM 1/2 W(7.0) 5.00% TA52
R868	0RD1002F609	10K OHM 1/6 W 5% TA52
R869	0RD4701F609	4.7K OHM 1/6 W 5% TA52
R870	0RD4702F609	47K OHM 1/6 W 5% TA52
R873	0RD4701F609	4.7K OHM 1/6 W 5% TA52
R874	0RD4701F609	4.7K OHM 1/6 W 5% TA52
R877	0RD4702F609	47K OHM 1/6 W 5% TA52
R902	0RD1002F609	10K OHM 1/6 W 5% TA52
R903	0RS5602K607	56K OHM 2 W 5.00% TA62
R905	0RD1001F609	1K OHM 1/6 W 5% TA52
R906	0RD2200F609	220 OHM 1/6 W 5.00% TA52
R907	0RS5602K607	56K OHM 2 W 5.00% TA62
R908	0RS4700H609	470 OHM 1/2 W 5.00% TA52
R909	0RN2201F409	2.2K OHM 1/6 W 1.00% TA52
R910	0RF0470K607	0.47 OHM 2 W 5.00% TA62
R912	0RN3301F409	3.3K OHM 1/6 W 1.00% TA52
R913	0RN3301F409	3.3K OHM 1/6 W 1.00% TA52
R914	0RD2401F609	2.4K OHM 1/6 W 5.00% TA52
R915	0RD1001F609	1K OHM 1/6 W 5% TA52
R917	0RD1803H609	180K OHM 1/2 W 5% TA52
R918	0RS5602K607	56K OHM 2 W 5.00% TA62
R921	0RN1001F409	1K OHM 1/6 W 1.00% TA52
R929	0RD2401F609	2.4K OHM 1/6 W 5.00% TA52
R930	0RS4700H609	470 OHM 1/2 W 5.00% TA52
R938	0RS4700H609	470 OHM 1/2 W 5.00% TA52
R946	0RD1001F609	1K OHM 1/6 W 5% TA52
R947	0RD2401F609	2.4K OHM 1/6 W 5.00% TA52
SWITCH		
SW01	140-315A	SWITCH, TACT SKHV17910B LG C&D NON 12V
SW02	140-315A	SWITCH, TACT SKHV17910B LG C&D NON 12V
SW03	140-315A	SWITCH, TACT SKHV17910B LG C&D NON 12V
SW04	140-315A	SWITCH, TACT SKHV17910B LG C&D NON 12V
SW05	140-315A	SWITCH, TACT SKHV17910B LG C&D NON 12V
SW06	140-315A	SWITCH, TACT SKHV17910B LG C&D NON 12V
SW1101	6600VM2002A	SWITCH, SDKEA3 ALPS IEC 250V 8A HORIZONTAL 480G
SPARK GAP		
SG904	6918VAX002H	SPARK GAP,AXIAL WSP-122N 1200V -100V,+300V
SG911	6918VAX002D	SPARK GAP,AXIAL WSP-301M 300V 20% 5MM
SG912	6918VAX002D	SPARK GAP,AXIAL WSP-301M 300V 20% 5MM
SG913	6918VAX002D	SPARK GAP,AXIAL WSP-301M 300V 20% 5MM

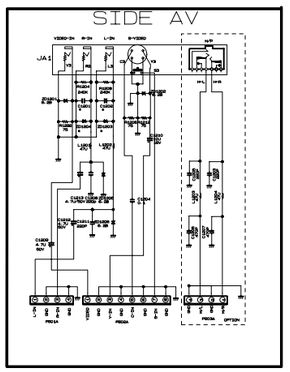
LOCA. NO	PART NO	DESCRIPTION
FILTER & CRYSTAL		
B100	6210TCE001G	FILTER, HH-1M3216-501 CERATEC 3216MM R/TP
FB001	125-022K	FILTER, FERRITE 1UH TAPING
FB204	125-022K	FILTER, FERRITE 1UH TAPING
FB301	125-022K	FILTER, FERRITE 1UH TAPING
FB401	125-022K	FILTER, FERRITE 1UH TAPING
FB402	125-022K	FILTER, FERRITE 1UH TAPING
FB801	125-022K	FILTER, FERRITE 1UH TAPING
FB802	125-022K	FILTER, FERRITE 1UH TAPING
FB805	125-022K	FILTER, FERRITE 1UH TAPING
FB853	125-022K	FILTER, FERRITE 1UH TAPING
FB855	125-022K	FILTER, FERRITE 1UH TAPING
FB856	125-022K	FILTER, FERRITE 1UH TAPING
FB902	125-022K	FILTER, FERRITE 1UH TAPING
J121	125-022K	FILTER, FERRITE 1UH TAPING
J59	125-022K	FILTER, FERRITE 1UH TAPING
L102	125-022K	FILTER, FERRITE 1UH TAPING
L601	125-022K	FILTER, FERRITE 1UH TAPING
T1101	150-F06T	FILTER, SQE3535 20MH PHY TURN
T811	150-F06T	FILTER, SQE3535 20MH PHY TURN
X001	156-A01L	RESONATOR,CRYSTAL 6.000MHZ 30PPM 16PF BK
X01	156-A01L	RESONATOR,CRYSTAL 6.000MHZ 30PPM 16PF BK
X101	6202VDB007B	RESONATOR,CRYSTAL 20.250MHZ 30PPM 13PF BK
X501	6202VDB007A	RESONATOR,CRYSTAL 5.000MHZ 30PPM 16PF BK
X601	156-A02M	RESONATOR,CRYSTAL 18.432MHZ 30PPM 10PF BK
ACCESSORIES		
A1	3828VA0421F	MANUAL,OWNERS MC036A IS/REG LG IT 112DE TX
A2	3828VD0151B	MANUAL,SERVICE MC036A RE-29FB51RQ LG
A3	6710V00112E	REMOTE CONTROLLER,MC036A W/O PIP W/TXT
MISCELLANEOUS		
F1101	0FS4001B53C	FUSE,SLOW BLOW4000MA 250 V 5.2X20 CY/CE
JA1201	6613V00006G	JACK ASSY, A/V IN 3P W/O E/P AUDIO R-RED S/W
LD1101	4930V00048A	HOLDER DIODE,LED ASSY
P1102	174-322D	POWER CORD,POWER W/FILTER L=300(179B)VDE
PA1101	6726VV0006H	REMOTE CONTROLLER RECEIVER 38KHZ MC00AA
RL801	6920VB1001E	RELAY, 5V 0.05A 250V 5A 100 OHM 1A
RL802	6920VB1001E	RELAY, 5V 0.05A 250V 5A 100 OHM 1A
SK900	6620VBD002A	SOCKET (CIRC),CPT 9PIN 14/360 STRAIGHT
TH801	163-058D	THERMISTOR,JA HWA 7 OHM 20% 80/60
TH810	163-048D	THERMISTOR,KL15L2R5 +/- 15% 125V
TU101	6700MF0001F	TUNER,TAUD-M230D LG MULTI FS 3SYS,MAIN,SPLITTER
VD801	164-003K	VARISTOR,SVC621D-14A ILJIN 620V 0%
ZN1101	164-003K	VARISTOR,SVC621D-14A ILJIN 620V 0%

LOCA. NO	PART NO	DESCRIPTION









ST-BY CONVERSION LIST

	W/ST-BY	W/O ST-BY
BLOCK A		
BLOCK B		

: WITH PLATE

P/N: 3854VA0121A-S1
DATE: 2003.07.15

SVC. SHEET : 3854VA0121A-S1